

Exhibit B

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

SVV TECHNOLOGY *
INNOVATIONS, INC. *
* September 23, 2024
VS. *
* CIVIL ACTION NO. 6:22-CV-311
ASUSTEK COMPUTER INC. *

BEFORE THE HONORABLE ALAN D ALBRIGHT
JURY TRIAL PROCEEDINGS
Volume 1 of 4

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1 Proceedings recorded by mechanical stenography,
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08:33 1 (Hearing begins.)

08:33 2 THE BAILIFF: All rise.

08:33 3 THE COURT: Good morning, everyone. You
08:33 4 may be seated.

08:33 5 My understanding is that we have a couple
08:33 6 of issues to take up.

08:33 7 Jen, would you call the case, please?

08:33 8 DEPUTY CLERK: A civil action in Case
08:33 9 6:22-cv-311, SVV Technology Innovations, Incorporated
08:33 10 versus ASUSTeK Computer Incorporated. Case called for
08:33 11 a jury trial proceeding.

08:33 12 THE COURT: And what are the issues?

08:33 13 MR. SIEGMUND: Good morning, Your Honor.
08:33 14 Mark Siegmund on behalf of the defendant.

08:33 15 The first one is our motion to strike
08:34 16 some new accused products that the plaintiffs put in
08:34 17 their supplemental expert report.

08:34 18 And so what's important here, Judge, is
08:34 19 that the accused products are these computer monitors
08:34 20 that you've seen us loading, but the model number and
08:34 21 the display panel number are what are the specific
08:34 22 accused item of infringement.

08:34 23 So in other words, it matters what's in
08:34 24 the display panel attached to the back of the monitor.

08:34 25 And so in their expert report, in

08:34 1 Dr. Farber's expert report, which I'll just show you
08:34 2 very quick. You can see this.

08:34 3 It's very tiny so it's hard to see. One
08:34 4 second.

08:34 5 Okay. So what you see here, Judge, is
08:34 6 you see the product right here, that's the model. And
08:35 7 then you have the component model number, that's the
08:35 8 display panel. And then Dr. Farber, and I believe
08:35 9 Mr. Credelle, you know, go through and say, okay. It's
08:35 10 accused or not accused.

08:35 11 So what they did is whenever we provided
08:35 12 updated sales information, they actually added some of
08:35 13 these unique combinations to their royalty base. And
08:35 14 we think, you know, two days before trial, or whenever
08:35 15 it was they did this -- I think it was on Friday --
08:35 16 that's entirely improper.

08:35 17 And what's worse is, actually, if you
08:35 18 look at this report, Judge, they actually changed a
08:35 19 product from not accused to now accused completely. So
08:35 20 it's even worse than just adding products that they
08:35 21 didn't include in the very beginning. He literally
08:35 22 changed the analysis.

08:35 23 Obviously, there's no infringement
08:35 24 opinion on these newly identified products or anything
08:35 25 like that, and we think that's entirely improper.

08:35 1 The thing that they're going to point to,
08:35 2 I think, is a representative product stipulation, which
08:35 3 I'll put on the screen right now. And the whole point
08:36 4 of -- I've represented a product stipulation,
08:36 5 obviously, Judge -- is for the parties to present
08:36 6 evidence on one model so we don't have to go through 90
08:36 7 accused products, or however many there are.

08:36 8 And so what they said was, well, you
08:36 9 agreed on this stipulation that only the model number
08:36 10 matters. And that's completely not true. At the time
08:36 11 we entered into the stipulation, the expert reports
08:36 12 were done and everyone knew it was a unique pairing of
08:36 13 model number and display panel.

08:36 14 And so we think them adding these 13 new
08:36 15 accused products is improper, and relying on this
08:36 16 stipulation that's supposed to make trial more
08:36 17 efficient is really kind of an ambush tactic, in all
08:36 18 fairness.

08:36 19 So we don't think that that's right.
08:36 20 Obviously, they can update their numbers. We don't
08:36 21 have a problem with that.

08:36 22 So that's the first issue that we have,
08:36 23 Judge.

08:36 24 THE COURT: Response?

08:37 25 MR. PEARSON: We don't agree.

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08:37 2 Daniel Pearson, Your Honor, on behalf of
08:37 3 plaintiff SVV.

08:37 4 The stipulation determines how the jury
08:37 5 will decide infringement.

08:37 6 If I could, please, see Paragraph 9,
08:37 7 Mr. Diaz.

08:37 8 Under the stipulation, if the jury finds
08:37 9 infringement, all of these model numbers at the model
08:37 10 number level will be found infringing. And Mr. --
08:37 11 Dr. Farber merely updated his royalty base to track
08:37 12 what the jury's verdict will be, which is if a model
08:37 13 unit is found infringing by the jury, it should be
08:37 14 assessed a per-unit running royalty under his analysis.

08:37 15 This is not a surprise. It's not an
08:37 16 ambush. This model-level stipulation was entered into
08:38 17 with the full and fair agreement of both parties, and,
08:38 18 in part, I believe it was done because the sales data
08:38 19 about the models and the panels was a mess.

08:38 20 You're going to hear a lot of testimony
08:38 21 throughout this trial about how little data ASUS could
08:38 22 give us -- little information ASUS could give us about
08:38 23 the sales data, which is, in part, why the stipulation
08:38 24 was entered into.

08:38 25 And so, Your Honor, all we are asking is

08:38 1 that the stipulation not be modified as they asked in
08:38 2 their --

08:38 3 THE COURT: When your expert testifies --
08:38 4 when your technical expert testifies, is he going to do
08:38 5 infringement by model numbers? Is that how he does it?

08:38 6 MR. PEARSON: Yes, he's going to follow
08:38 7 the stipulation.

08:38 8 THE COURT: So in your opinion, these --
08:38 9 what the defendant is calling additional products, in
08:38 10 your opinion, your technical expert has provided an
08:39 11 opinion that would encompass these because they fall
08:39 12 within the same model number?

08:39 13 MR. PEARSON: That is my opinion; it's
08:39 14 also the binding text of the stipulation entered into
08:39 15 by the parties and filed.

08:39 16 THE COURT: I'm more concerned about,
08:39 17 when we get to that part of the trial, when you're
08:39 18 having to put on your infringement case, what -- and if
08:39 19 they're going to say -- if they can say that it's not
08:39 20 in his report because he didn't consider those models,
08:39 21 your response would be, no, he did consider these
08:39 22 models.

08:39 23 MR. PEARSON: Yes, Your Honor.

08:39 24 THE COURT: And then what your argument
08:39 25 is is that the damages expert has now updated and

08:39 1 included these models for purposes of the amount of
08:39 2 money that -- that he wants the jury to award.

08:39 3 When you're putting on your damages
08:39 4 evidence through your expert report, is he going to
08:40 5 break it down? Does he essentially have a royalty
08:40 6 rate, and then he says, we've got sales of these
08:40 7 products and if we apply the rate against the sales of
08:40 8 those products, we come up with X bottom number?

08:40 9 MR. PEARSON: Yes, Your Honor. And
08:40 10 that's why we think it's important to conform the units
08:40 11 in the royalty base to the stipulation where the
08:40 12 party -- where the jury will find infringement so that
08:40 13 those two things match and we don't get an inconsistent
08:40 14 verdict.

08:40 15 THE COURT: So when you are putting on
08:40 16 the evidence, are you able to do it in a way through
08:40 17 your damages expert that would make it clear in the
08:40 18 record of how many units the stub -- what I'm calling
08:40 19 the stub group here, that the defendants are unhappy
08:40 20 about, would you be able to put into evidence how many
08:40 21 those are?

08:40 22 Does that make sense?

08:40 23 MR. PEARSON: If Your Honor asks me to, I
08:40 24 can.

08:41 25 THE COURT: Well, what I'm thinking is,

08:41 1 I'm going to allow you to do it. But if you do it that
08:41 2 way, if -- on appeal, if the Circuit thinks that I was
08:41 3 wrong for allowing it, it's a pretty easy fix, I would
08:41 4 think.

08:41 5 You -- to -- in the amount -- I think
08:41 6 it's okay for you to do it. But I think it would be
08:41 7 easier on the record to make it clear which -- what
08:41 8 amount of the damages came from the products that the
08:41 9 defendant is unhappy about and thinks that you
08:41 10 shouldn't get to talk about.

08:41 11 MR. PEARSON: Very well, Your Honor. And
08:41 12 I will say that that specific total is not currently
08:41 13 listed in Dr. Farber's attachments, but --

08:41 14 THE COURT: So as long as you get into
08:41 15 the record the evidence that'll allow the defendant to
08:41 16 argue it's too high and it should be reduced by this
08:41 17 amount, then I think both sides will be protected.

08:41 18 MR. PEARSON: Very well, Your Honor.

08:41 19 THE COURT: And I also think it's more
08:41 20 efficient to allow them to consider those products now
08:42 21 and give us one number.

08:42 22 MR. PEARSON: Thank you, Your Honor.

08:42 23 THE COURT: What other issues do we have?

08:42 24 MR. SIEGMUND: I think just two more.

08:42 25 This one should be pretty easy, Judge. So the products

08:42 1 stipulation that you just heard about is what we
08:42 2 believe should be controlling, and it seems like it is.

08:42 3 So what they wanted to do is enter into
08:42 4 evidence a whole bunch of exhibits that are just
08:42 5 pictures of the products and some teardown. This is
08:42 6 what I'm showing you on the screen like this.

08:42 7 And we have no problem with them doing
08:42 8 that with the representative products, but the -- I
08:42 9 don't know -- 40 or 50 products that are not
08:42 10 representative products, we have objected to and said
08:42 11 it's key motive, it's confusing to the jury.

08:42 12 And that's the whole point of the
08:42 13 representative products, that you put in evidence of
08:42 14 infringement of the representative products that -- so
08:42 15 that's our issue. We don't have a problem if they use
08:42 16 the representative product.

08:42 17 Does that make sense?

08:42 18 THE COURT: Sure.

08:43 19 MR. MCCARTY: Good morning, Your Honor.
08:43 20 It's Warren McCarty for the plaintiff.

08:43 21 The objections to these exhibits are
08:43 22 actually with respect to our fact witness,
08:43 23 Dr. Vasylyev, whose job it is -- it's not to prove
08:43 24 infringement. So the representative product
08:43 25 stipulation is a little bit of a side issue. We're not

08:43 1 going to be wasting the jury's time on side issues or
08:43 2 other products that aren't at issue in the case.

08:43 3 What we are going to do or potentially
08:43 4 need to do is prove things like presuit notice, where
08:43 5 you had knowledge of our infringement contentions
08:43 6 through our presuit letters and so forth. And those
08:43 7 relate to some products that aren't the representative
08:43 8 products in the case. So we need to be able to say
08:43 9 here's how they look and --

08:43 10 THE COURT: I'm just going to hear what
08:43 11 you offer them for at trial.

08:43 12 MR. MCCARTY: We're not going to waste
08:43 13 the jury's time. Thank you.

08:43 14 THE COURT: Yes, sir.

08:43 15 MR. SIEGMUND: I think this might be the
08:43 16 last one.

08:44 17 This is the product stipulation. I
08:44 18 believe the plaintiffs want to offer it into evidence,
08:44 19 and our position is it's not evidence. It's a
08:44 20 stipulation, and that's pretty much it on this one.

08:44 21 THE COURT: I think what I would prefer
08:44 22 to do -- I -- I don't think the stipulation should come
08:44 23 into evidence, but what I would suggest that you all do
08:44 24 is come up with some very anodyne -- something -- a
08:44 25 paragraph, short paragraph I could read in the jury

08:44 1 charge that says that there's been this type of
08:44 2 stipulation.

08:44 3 I worry that if a jury saw this, they
08:44 4 might think that it meant more -- it meant that the
08:44 5 defendant was actually stipulating to some form of --
08:44 6 the way it looks to me, I think it'd be prejudicial.

08:44 7 But I'm happy to have -- if you all can
08:44 8 come -- cobble together a paragraph that explains why
08:44 9 the jury didn't have to see a thousand products and how
08:45 10 they can consider the evidence, that would be, I think,
08:45 11 the best solution.

08:45 12 MR. BURESH: Thank you, Your Honor.

08:45 13 THE COURT: Anything else?

08:45 14 MR. SIEGMUND: That's it, Your Honor.

08:45 15 THE COURT: Anything from plaintiff?

08:45 16 MR. CALDWELL: Nothing from the
08:45 17 plaintiff.

08:45 18 (Brief off-the-record discussion.)

08:45 19 THE COURT: Okay. We'll get started.

08:45 20 I'll let you know as soon as they're all here. I'll
08:45 21 give you a five-minute warning from then, and then
08:45 22 we'll get started with opening arguments.

08:45 23 Does the defendant -- are you going to do
08:45 24 your opening argument immediately after theirs?

08:45 25 MR. BURESH: Yes. We are, Your Honor.

08:45 1 THE COURT: Okay. Very good.

08:45 2 Anything else?

08:45 3 MR. CALDWELL: No, sir.

08:45 4 THE COURT: Okay.

08:45 5 (Recess taken.)

08:55 6 THE BAILIFF: All rise.

08:55 7 THE COURT: Please remain standing for
08:55 8 the jury.

08:55 9 (Jury entered the courtroom.)

08:56 10 THE COURT: Thank you. You may be
08:56 11 seated.

08:56 12 DEPUTY CLERK: A civil action in Case
08:56 13 6:22-cv-311, SVV Technology Innovations, Incorporated
08:56 14 versus ASUSTeK Computer Incorporated. Case called for
08:56 15 a jury trial proceeding.

08:56 16 THE COURT: Counsel, if you'd be so kind
08:56 17 as to introduce yourself and introduce the folks who
08:56 18 are at your table and who'll be presenting to the jury.
08:56 19 I'll start with the plaintiff, please.

08:56 20 MR. CALDWELL: Thank you.

08:56 21 Should we do it from the lectern,
08:56 22 Your Honor?

08:56 23 THE COURT: Wherever you think you can be
08:56 24 heard the best would be great.

08:56 25 MR. CALDWELL: Good morning. My name is

08:56 1 Brad Caldwell, and I have the pleasure of representing
08:56 2 SVV Technologies.

08:56 3 You've already met my partner, Mr. Warren
08:56 4 McCarty, and then the inventor, Dr. Sergiy Vasylyev.
08:56 5 And then also presenting this case with us is my
08:56 6 partner Seth Reich, Aisha Haley, and Daniel Pearson.

08:57 7 And there's other folks that are behind
08:57 8 the scenes that make everything actually work, but I
08:57 9 won't introduce all those folks, then. We look forward
08:57 10 to presenting the case to you.

08:57 11 THE COURT: Yes, sir.

08:57 12 MR. BURESH: Thank you, Your Honor.

08:57 13 Ladies and gentleman, my name is Eric
08:57 14 Buresh. This is the first time we've got to chat. In
08:57 15 about 30 minutes, I'll get to chat with you a little
08:57 16 bit more.

08:57 17 By way of introduction, you'll be hearing
08:57 18 from Michelle Marriott, who's sitting with me at the
08:57 19 counsel table. You've met Mark Siegmund last week, and
08:57 20 you'll be hearing from him.

08:57 21 And then coming in from Taiwan is our
08:57 22 corporate representative on behalf of ASUS, and his
08:57 23 name is James Lee. And like the plaintiff, there's a
08:57 24 whole lot of people that help us do what we do that are
08:57 25 sitting around the rest of the room. So we look

08:57 1 forward to presenting our case, and I'll chat with you
08:57 2 again in a few minutes.

08:57 3 THE COURT: Ladies and gentleman, let me
08:57 4 introduce myself formally to you since we didn't meet
08:58 5 during the voir dire. My name is Alan Albright. I'm
08:58 6 the United States district judge for the Waco Division
08:58 7 of the Western District of Texas.

08:58 8 To give you an idea of how large -- I
08:58 9 know some of you all had to drive a ways to get to this
08:58 10 courthouse in the Waco Division. To give you an idea
08:58 11 of how large our district is, San Antonio is in our
08:58 12 district, Bastrop's in our district, and El Paso is in
08:58 13 our district.

08:58 14 So Los Angeles is closer to El Paso than
08:58 15 San Antonio and we are. So it's the biggest -- other
08:58 16 than Alaska, it's the biggest district in the United
08:58 17 States.

08:58 18 So you all are very blessed this morning.
08:58 19 I've had all of these lawyers in front of me on several
08:58 20 occasions. They're really outstanding. I don't -- we
08:58 21 don't always have that good fortune, but you are lucky
08:58 22 here to have really good lawyers. The case is going to
08:58 23 be very interesting.

08:58 24 You're about to hear the opening
08:58 25 arguments in this trial. These arguments are only a

08:59 1 blueprint or a roadmap for what the lawyers believe or
08:59 2 anticipate the evidence is going to be.

08:59 3 You're not going to hear any evidence
08:59 4 until the plaintiff calls their first witness, and at
08:59 5 that point you can begin considering what you hear for
08:59 6 purposes of resolving this case.

08:59 7 But that's not to say that the opening
08:59 8 argument isn't important. It is. And it's usually one
08:59 9 of the most enjoyable parts of the trial. So I look
08:59 10 forward to hearing both lawyers tell us what this case
08:59 11 is about.

08:59 12 Counsel?

08:59 13 MR. CALDWELL: Thank you, Your Honor.

08:59 14 OPENING STATEMENT ON BEHALF OF THE PLAINTIFF

08:59 15 MR. CALDWELL: Good morning. Thank you
08:59 16 again for graciously performing your civic duty. It's
08:59 17 quite an honor. I think it's often said that it's the
08:59 18 second highest form of service you can provide to this
08:59 19 country besides being in the armed forces, and we
08:59 20 really appreciate you guys being here.

09:00 21 You spoke quite frankly with us on
09:00 22 Thursday, and so I feel like I should do the same, a
09:00 23 little bit of background, kind of same level you gave.

09:00 24 I grew up down Highway 31 in Athens,
09:00 25 Texas. I have an electrical engineering degree from

09:00 1 Texas A&M, and I have a law degree from the orange
09:00 2 school down in Austin. And now I live in Dallas where
09:00 3 I get to practice these kinds of cases with a lot of my
09:00 4 best friends. So other than actually living in England
09:00 5 for three months when I was in law school, I've pretty
09:00 6 much always been within 100 miles of here.

09:00 7 I met my wife when she was in vet school
09:00 8 at Texas A&M. She's the smart one in the family. We
09:00 9 have two kids. I have a 16-year-old. She got her
09:00 10 driver's license eight days ago. So stay out of her --
09:00 11 seven days ago, so stay out of Dallas for a little bit.
09:00 12 And then I have a little boy who, despite living in
09:00 13 Texas, is somehow addicted to playing ice hockey.

09:00 14 So one of the big things about this job
09:00 15 is that you get to meet really cool people and learn
09:00 16 remarkable things, and if you're a bit of a nerd like
09:00 17 me, it's pretty awesome.

09:01 18 But one of the things is occasionally you
09:01 19 meet someone that just really stands out. And it's
09:01 20 sometimes said that the American dream is the ideal
09:01 21 that through hard work, determination, and initiative,
09:01 22 really anyone in this country can achieve success and
09:01 23 prosperity.

09:01 24 And today you're going to meet someone
09:01 25 who's an American citizen who has certainly held up his

09:01 1 end of the bargain. And I'm proud to represent
09:01 2 Dr. Sergiy Vasylyev and SVV Technologies.

09:01 3 Dr. Vasylyev, please stand up.

09:01 4 Thank you.

09:01 5 Now, Dr. Vasylyev has a remarkable story
09:01 6 to tell and you're going to hear it this morning, so
09:01 7 I'm not going to steal his thunder.

09:01 8 Now, he's brilliant. He has two Ph.D.s;
09:01 9 one's in physics and one's in math. He's what you
09:01 10 might call an astrophysicist, and he's an expert in
09:01 11 light and optics.

09:01 12 So what does that mean, to be an expert
09:01 13 in light or have a business that's in light? And you
09:01 14 might think of like a lamp or these ornate overhead
09:02 15 lights or even the sunlight, which is pretty intense
09:02 16 sometimes, as you know. And you're not far off when
09:02 17 you think that way.

09:02 18 The thing is, though, that SVV and
09:02 19 Dr. Vasylyev focus on very high-tech applications of
09:02 20 light, and it's pretty important. They run a business
09:02 21 under the tradename of Lucent Optics and offer a
09:02 22 variety of products. The common thread is they want to
09:02 23 make the absolute most out of the light that you have
09:02 24 available to you.

09:02 25 And I'll just highlight one of these for

09:02 1 fun, is this one in the middle right here with the hand
09:02 2 called the Daylighting Fabric.

09:02 3 So if you imagine an office building or
09:02 4 even this one; of course, we have massive windows in
09:02 5 this particular room.

09:02 6 But in a typical office building,
09:02 7 sometimes maybe there's a smaller window. And right in
09:02 8 front of it, like your candles are melting from the
09:02 9 heat of the sun, but throughout the rest of the room,
09:02 10 it's still kind of dark. And you turn on a lamp and
09:02 11 turn on the overhead lights and all that. So it's real
09:03 12 hot in some spots, and you're burning electricity in
09:03 13 others.

09:03 14 Well, with the Daylighting Fabric,
09:03 15 assuming this is that room as an example, when you add
09:03 16 Dr. Vasylyev's fabric, basically it grabs the light and
09:03 17 can steer it and channel it and spread it uniformly and
09:03 18 evenly. It's pretty amazing.

09:03 19 In this week, though, we're going to
09:03 20 focus on SVV's work in the high-tech field of screens
09:03 21 and monitors like computer screens.

09:03 22 Now, like many groundbreaking companies,
09:03 23 SVV started in a garage, and in this picture
09:03 24 Dr. Vasylyev was working on something he called a
09:03 25 "solar concentrator."

09:03 1 But the laboratory's a bit more refined
09:03 2 these days. And what I'm showing here is
09:03 3 Dr. Vasylyev's laboratory in Sacramento, California.

09:03 4 And while SVV may not have been known to
09:03 5 you until Thursday or known to us before we got to work
09:03 6 on this case, it's not an unknown in the industry. I
09:04 7 think it's fair to say the industry has taken notice.

09:04 8 SVV and Dr. Vasylyev have grants from
09:04 9 entities like the United States Department of Energy,
09:04 10 the National Science Foundation, California Energy
09:04 11 Commission. They've all gotten behind the work of
09:04 12 Dr. Vasylyev. Sometimes it's grants or sometimes they
09:04 13 hire him to help them tackle challenges that they're
09:04 14 facing.

09:04 15 And it's not only governments too.
09:04 16 Monitor companies like Samsung and MSI have paid to get
09:04 17 permission to use Dr. Vasylyev's patented ideas.

09:04 18 So why monitor companies, if I've shown
09:04 19 you this lighting film?

09:04 20 Well, as Dr. Vasylyev will explain, as he
09:04 21 was innovating and capturing, steering, and
09:04 22 concentrating light, he was in some ways developing the
09:04 23 reverse technologies of expanding, steering, and
09:05 24 transmitting light evenly. They have similarities,
09:05 25 just kind of in reverse.

09:05 1 And we're here today because some of
09:05 2 Dr. Vasylyev's inventions are extremely light
09:05 3 efficient, cost-efficient ways to light up monitor
09:05 4 screens. So in context, let's step back just a little
09:05 5 bit.

09:05 6 Anybody remember TVs in, like, the '80s
09:05 7 and '90s? So we had one just like this. This is a
09:05 8 Curtis Mathes television. I wonder if anybody's, like,
09:05 9 old enough to remember Curtis Mathes.

09:05 10 Believe it or not, they were made in
09:05 11 Athens, Texas. My mom worked at Curtis Mathes for
09:05 12 years in the accounting department. Dad worked in the
09:05 13 furniture department when he -- finishing, when he was
09:05 14 in high school.

09:05 15 Anyway, those days are gone, and you
09:05 16 won't really see TVs like this anymore if you run down
09:05 17 to Best Buy, because I think we all kind of know they
09:05 18 went sort of towards flat panels.

09:05 19 But even when they first went to flat
09:05 20 panels, they weren't that thin. I mean, they're kind
09:05 21 of more like this. But over time what's happened is
09:06 22 they've just gotten thinner and thinner and thinner.
09:06 23 It's like a race to be the thinnest.

09:06 24 But there's also issues of power
09:06 25 consumption and good imagery and even lighting, all of

09:06 1 that. And managing light was a headache from the
09:06 2 start, and it only gets worse when you try to go
09:06 3 thinner.

09:06 4 In those modern kinds of screens, the
09:06 5 light typically comes from an LED, a light-emitting
09:06 6 diode. And oftentimes, they're blue. And if you ever
09:06 7 heard of, like, color being made from RGB -- like red,
09:06 8 green, and blue -- that's the blue part of it.

09:06 9 Initial efforts at using LEDs weren't
09:06 10 actually great. Like I said, the monitors weren't that
09:06 11 thin. They generated, oftentimes, too much heat, which
09:06 12 can be bad for longevity and warranty concerns.

09:06 13 If you're wasting a bunch on heat, you're
09:06 14 also burning electricity you don't need to.

09:06 15 They had too many LEDs, which cost more.
09:06 16 And they had patchy images.

09:06 17 So in the early days, a lot of the
09:06 18 critiques of thinner monitors were the visual hot spots
09:06 19 where some areas were really bright kind of in front of
09:06 20 where the LEDs were, and other areas were sort of
09:07 21 darker.

09:07 22 But if you enter Dr. Vasylyev's
09:07 23 technology, what he did is he invented an efficient,
09:07 24 slim, elegant way to spread that harsh blue light. And
09:07 25 it's called a "waveguide," which he can explain later.

09:07 1 But basically, if you imagine that the
09:07 2 light originates from just a thin row of LEDs -- and
09:07 3 I'll point to the top of this monitor just sort of for
09:07 4 reference, but a thin row of LEDs on the edge. And
09:07 5 then it's steered, spread out, and emerges from the
09:07 6 front in an even spread that he refers to as
09:07 7 collimating the light instead of scattering it.

09:07 8 And it very efficiently uses the LEDs you
09:07 9 have. You can use fewer, it can be smaller LED
09:07 10 material; more cost efficient, heat efficient, energy
09:07 11 efficient, everything.

09:07 12 And that's what Dr. Vasylyev is going to
09:07 13 describe to you. But again, the aim is to use the
09:08 14 light you have as efficiently as possible.

09:08 15 Now, Dr. Vasylyev's inventions, it turns
09:08 16 out, also work with a very cool emerging technology
09:08 17 called "quantum dots." I love to give this kind of
09:08 18 cool demonstration.

09:08 19 This right here is a vial of quantum
09:08 20 dots. It looks like kind of a dark orange color,
09:08 21 right? And that's -- it's neat, in and of itself, but
09:08 22 that doesn't mean much.

09:08 23 But what quantum dots are is a chemical
09:08 24 nanoparticle that has pretty cool properties. If you
09:08 25 excite it, or energize it, with light or energy of a

09:08 1 certain wavelength, it retransmits a different
2 wavelength.

09:08 3 So in this one, when we shine the blue
09:08 4 light on it, it glows red. If you shine more blue
09:08 5 light on it, it glows even more red. It's pretty
09:08 6 amazing.

09:08 7 Now, what you'll find is, I already
09:08 8 mentioned the blue. So when you use blue backlights
09:09 9 and red and green quantum dots, you get the RGB, the
09:09 10 red, green, and blue you need to mix to make colors.
09:09 11 And those things make beautiful colors that help sell
09:09 12 monitors.

09:09 13 So it helps ASUS sell these really,
09:09 14 really high-end gaming monitors.

09:09 15 Dr. Vasylyev thought his ideas were real
09:09 16 breakthroughs. So he wanted to file patent
09:09 17 applications. Let's talk very briefly about what a
09:09 18 patent is. And I know you guys got to watch the video
09:09 19 on Thursday.

09:09 20 Patents have their origin in the
09:09 21 Constitution, because the Founding Fathers invited
09:09 22 Congress to pass laws that would encourage innovation.

09:09 23 And the idea is, you pass a law that says
09:09 24 if you'll come up with stuff, you'll dump money into
09:09 25 research or writing books or, you know, creating

09:09 1 content, but inventing things in particular, if you
09:09 2 dump money into that and then you write it up and
09:09 3 disclose it to the public to teach other people, the
09:10 4 government will give you an exclusive right to your
09:10 5 invention for a limited period of time.

09:10 6 And that's basically what it is.

09:10 7 But you don't just say, hey, I want a
09:10 8 patent and get one. You have to apply, and then it's
09:10 9 examined by an examiner, as you've heard, who will
09:10 10 determine whether it's new -- meaning it's not -- it's
09:10 11 new, it's called "novel" -- and it's not just an
09:10 12 obvious change from something that came before. And if
09:10 13 they agree that you've met those requirements, you are
09:10 14 awarded patents.

09:10 15 So in this case, Dr. Vasylyev has been
09:10 16 awarded four patents by the United States Patent and
09:10 17 Trademark Office, and each one has this longer number
09:10 18 on it. This is 9,880,342. Just to avoid the mouthful,
09:10 19 we'll call this the '342 patent. And we will refer to
09:10 20 the others as the '562, the '089, and the '318.

09:11 21 So years after Dr. Vasylyev had put his
09:11 22 patent applications on file with the Patent Office, he
09:11 23 started seeing ASUS products with familiar hallmarks.
09:11 24 And he wondered how they were doing their backlighting.

09:11 25 So what you're going to hear is, he

09:11 1 bought an ASUS monitor, he opened it up and started
09:11 2 looking inside to see how they were doing. And it
09:11 3 looked a bit too familiar. ASUS was using his patented
09:11 4 waveguide invention.

09:11 5 So as Dr. Vasylyev can explain, these are
09:11 6 some teardowns -- or photos from his teardown of the
09:11 7 very first ASUS that he bought to test. And he'll
09:11 8 explain what he found on the inside.

09:11 9 Now, he could have sued ASUS right at
09:11 10 that moment. Okay? You don't have to send them a
09:11 11 letter, you don't have to engage. At that point, if
09:11 12 you believe there's patent infringement, you can file a
09:11 13 lawsuit that day.

09:11 14 But he's not that type. They didn't want
09:11 15 to just run to court against ASUS. But he hired a
09:11 16 lawyer and they wrote a polite letter to ASUS.

09:12 17 Now, ASUS has some companies that are
09:12 18 sort of all over the world, we'll talk about that in a
09:12 19 minute, but he wasn't sure if United States patents
09:12 20 were handled by the folks in Taiwan or handled by
09:12 21 someone in the United States. So he actually sent the
09:12 22 letter to both of them.

09:12 23 And this is the letter, and we don't have
09:12 24 to read every bit of it, but basically, he introduces
09:12 25 that he has United States patents. He references the

09:12 1 four that are in this case. He references that monitor
09:12 2 I showed you, and he gives example claims that he
09:12 3 thinks are at issue, because if they practice one
09:12 4 claim, that's patent infringement. Doesn't matter if
09:12 5 it's 2 or 12. One claim, that's patent infringement.
09:12 6 And he gave several examples.

09:12 7 So after about a month, SVV got a
09:12 8 response by e-mail. I'd like to show you. This is
09:12 9 going to be some of the evidence in the case that I
09:12 10 think is pretty important.

09:12 11 This came from a gentleman named Jason Wu
09:12 12 at ASUSTeK in Taiwan. At first he says he's from the
09:13 13 legal affairs center. He's going to be the person, I
09:13 14 guess, that engages with us that -- out of Taiwan.
09:13 15 Okay?

09:13 16 Now, he says: We are open to engaging
09:13 17 with SVV in discussions regarding patent licensing.

09:13 18 Great. But he also makes a request. He
09:13 19 says: I would like you to provide us with exemplary
09:13 20 claim charts. So I want you to go back and look at
09:13 21 your patents and tell us how our products compare to
09:13 22 your patent.

09:13 23 Okay. And it might just be a delay
09:13 24 tactic, but, you know, maybe this is a -- the way that
09:13 25 they like to negotiate in good faith.

09:13 1 So Dr. Vasylyev tried to be optimistic
09:13 2 and went back to do that. They entered a very common
09:13 3 confidentiality agreement. And he set to work. And it
09:13 4 turned into several months of work. Many, many -- like
09:13 5 six or eight months worth of lab work for Dr. Vasylyev
09:13 6 and his lab assistant.

09:14 7 They bought a bunch of monitors and they
09:14 8 put together 40 charts mapping ASUS monitors to his
09:14 9 patent claims. Now, that's dozens of products. But
09:14 10 obviously, they don't sell one of each type of monitor,
09:14 11 right?

09:14 12 It's -- this is likely meaning millions
09:14 13 of monitors sold with his patented technology. And
09:14 14 here's some of the monitors that he tore down.

09:14 15 So right when SVV was about ready to send
09:14 16 those charts over to ASUS, they reached back out and
09:14 17 said, I just want to make sure, Mr. Wu, that you're
09:14 18 still the person I need to send these to because we're
09:14 19 ready to keep going in our negotiations.

09:14 20 And this is where the correspondence
09:14 21 seems to get a little strange.

09:14 22 Before I go to the response, I kind of
09:14 23 want to remind you about last Thursday. Remember ASUS'
09:14 24 lawyers said to you, this case is very important to our
09:14 25 client. It's so important that he's traveling all the

09:15 1 way from Taiwan -- which if you've looked at a map,
09:15 2 that's a pretty long ways from here. We've been
09:15 3 falsely accused and we're coming to the courthouse to
09:15 4 clear our name.

09:15 5 Well, what do they say to SVV back in
09:15 6 2021? Remember, this is nine months after asking
09:15 7 Dr. Vasylyev to go make claim charts for him. They
09:15 8 decide they don't even want the claim charts.

09:15 9 He says, you know, actually, ASUSTeK is
09:15 10 not the appropriate company for you to discuss. He's
09:15 11 not saying go talk to the folks in California. He's
09:15 12 now going to put it off on third parties. He's like,
09:15 13 it turns out ASUSTeK does not manufacture any display
09:15 14 panels and we don't know how the display panels are
09:15 15 implemented.

09:15 16 So he's basically saying it doesn't
09:15 17 matter if somebody put our name on it. You need to go
09:15 18 talk to somebody else that made it for us. And if
09:15 19 there was any doubt how ASUS was going to approach SVV
09:15 20 in these negotiations, that doubt didn't linger too
09:16 21 long.

09:16 22 Mr. Wu says: If you insist on talking to
09:16 23 us, you should expect it's going to take much longer
09:16 24 time.

09:16 25 So SVV, though, they didn't give up hope.

09:16 1 They still sent the claim charts. And a little while
09:16 2 later, after sending the claim charts, they heard back
09:16 3 from ASUS again, but ASUS just continued to dig in a
09:16 4 little further.

09:16 5 They tell us actually, now, ASUS
09:16 6 outsourced design and manufacturing to ODMs, like
09:16 7 other -- it's original device manufacturers or an
09:16 8 acronym like that. ODMs, third parties. We don't know
09:16 9 what panels our monitors have in them.

09:16 10 And then he says: Maybe you can figure
09:16 11 it out yourself since you're tearing them open. You
09:16 12 can figure out what panels we have in our monitors.

09:16 13 So if you kind of think about the big
09:16 14 picture here starting nine months earlier, first it
09:16 15 was, please go away and spend your time making these
09:16 16 charts. Delay.

09:16 17 Now that you've made the charts, I don't
09:17 18 want them, go talk to a third party. Deflect.

09:17 19 And then last Thursday, it was, we can't
09:17 20 wait to come in here and clear our name, because
09:17 21 they're going to say they don't infringe. So now it's
09:17 22 deny.

09:17 23 It's been delay, deflect, deny. And that
09:17 24 about sums up how this goes.

09:17 25 Now, as you can see, they have deflected

09:17 1 left, right, and center for years, but I'd like to give
09:17 2 you a diagram of some corporate entities to kind of
09:17 3 help put that in context. The idea is to sort of help
09:17 4 you follow both the money and the finger-pointing
09:17 5 that's in this case.

09:17 6 So what I've done here is a little
09:17 7 diagram with -- and I don't know if the light green is
09:17 8 showing up on your monitor, but sort of the box in the
09:17 9 middle with a little bit light green dotted line around
09:17 10 it. And that's kind of the ASUS family of companies.
09:17 11 There's more, but those are the ones that really matter
09:17 12 for this.

09:17 13 We've got the one at the top in Taiwan,
09:17 14 ASUSTeK Computer. That's the defendant in this case,
09:17 15 out of Taiwan.

09:17 16 Down at the bottom, ACI, that's their
09:17 17 U.S. affiliate. It's -- in the -- even though it's the
09:18 18 U.S. one, it's called ASUS Computer International.
09:18 19 That's a U.S. one.

09:18 20 And then there's this other one in the
09:18 21 middle, ASGL. That's what they call it, but what it
09:18 22 really means is ASUS Global Pte Limited. It's sort of
09:18 23 a middleman based in Singapore.

09:18 24 But anyway, all the stuff in the green
09:18 25 box is ASUS. All the dollars rode to the red box at

09:18 1 the top, okay, that's the defendant that's in this
09:18 2 case.

09:18 3 So now, when ACI wants to sell a monitor
09:18 4 to a U.S. person, they tell the Singapore folks who
09:18 5 tell the people in Taiwan and the people in Taiwan pick
09:18 6 something that their outside manufacturer can make.

09:18 7 So you put our name on it and send it to
09:18 8 the folks in the U.S. So that's kind of the product
09:18 9 flow here, is you guys -- someone else make it, send it
09:18 10 to the folks in the U.S. And when those dollars come
09:18 11 in, they go all the way up to ASUS in Taiwan.

09:18 12 I've also got this other entity on here
09:19 13 that is the panel manufacturer, because in some cases,
09:19 14 this outside maker of the monitors, assembler of the
09:19 15 monitor, may get the light-up display panel from
09:19 16 someone else. So these are kind of the parties that
09:19 17 you may hear referenced.

09:19 18 Now, the law says that Dr. Vasylyev and
09:19 19 SVV have the right to exclude others from using his
09:19 20 invention. And the actual words in the patent law is
09:19 21 he has the right to exclude others from making, using,
09:19 22 offering for sale, or selling the patented inventions
09:19 23 or from importing them.

09:19 24 And we believe the evidence will show --
09:19 25 and by the way, any one of those -- pick any one of

09:19 1 those, that is an act of infringement under the law,
09:19 2 and the Court will instruct you on that later in the
09:19 3 case.

09:19 4 But we think they're ticking the box a
09:19 5 lot of different ways, via selling, offering to sell,
09:19 6 and importing.

09:19 7 So to help you sort out the issues
09:20 8 related to infringement by ASUS, we're going to present
09:20 9 what's called an "expert witness." And, I mean, he is
09:20 10 an expert in this legitimately, but "expert" also has
09:20 11 sort of a meaning in the cases in the sense that he can
09:20 12 offer you opinions on the issues that are going to be
09:20 13 asked of you later in the case on the verdict form.

09:20 14 And the expert that we're going to
09:20 15 present on technology, who has amazing credentials
09:20 16 right in this area, is a gentleman named Mr. Thomas
09:20 17 Credelle.

09:20 18 Mr. Credelle, will you please stand up?

09:20 19 Thank you.

09:20 20 Now, Mr. Credelle's experience in this
09:20 21 area is legit. Like we said, 40 years of real-world
09:20 22 experience in this area. He spent his career doing
09:20 23 research, development, and engineering of flat panel
09:20 24 displays.

09:20 25 He has a master's from MIT in

09:20 1 electro-optics in solid-state electronics, and he's
09:20 2 worked for GE, Apple, Motorola, and others. He's going
09:20 3 to tell you some pretty fascinating things that he was
09:21 4 responsible for in this industry, the display industry.

09:21 5 In this case, Dr. Credelle did the hard
09:21 6 work of studying the insides of the infringing
09:21 7 monitors, and he's going to get into the details of the
09:21 8 lighting systems in those monitors.

09:21 9 And then what he's going to do is he's
09:21 10 going to go carefully limitation-by-limitation through
09:21 11 the asserted patent claims, which is kind of like a
09:21 12 checklist of infringement.

09:21 13 And I won't do it now, but you'll see
09:21 14 boards like this where the patent claims that are
09:21 15 asserted in this case are sort of broken down into
09:21 16 elements like a checklist. And we -- it's our burden
09:21 17 to prove infringement, and he's the one that's going to
09:21 18 do it.

09:21 19 Now, remember, we only need to show one
09:21 20 claim, and there's several claims in these patents.
09:21 21 We're not going to go through all of them. It's not
09:21 22 going to be, I don't know, a ten-hour technical death
09:21 23 march or anything like that. But it will take time
09:21 24 because we want to give you the evidence you need to be
09:21 25 confident in your verdict.

09:21 1 So we'll show a few different claims
09:21 2 which I'll flip through on the screen here. I'm not
09:22 3 going to go through all the details, but we're going to
09:22 4 do some claims in each of the four patents.

09:22 5 Now, how do you prove infringement? The
09:22 6 law is that SVV is entitled to damages, like money
09:22 7 damages as compensation. That's what you can get in
09:22 8 this court is money damages. And we know that SVV is
09:22 9 entitled to damages because it is the law.

09:22 10 And Section 248 of the patent laws says
09:22 11 that the compensation has to be adequate to compensate
09:22 12 for infringement but in no event less than a reasonable
09:22 13 royalty for the use made of the invention by the
09:22 14 infringer.

09:22 15 So ASUS can't just say, I tell you what,
09:22 16 give this guy a small amount. It'll be fine.

09:22 17 Like, they can't do that. It has to be
09:22 18 based on ASUS's use of SVV's patented inventions. I
09:23 19 mean, that's not a trivial matter to assess, right? So
09:23 20 we're going to have to present evidence to you to help
09:23 21 quantify and value the value of ASUS's infringement.

09:23 22 It involves breaking down numbers that
09:23 23 are specific to ASUS, like internal financials and
09:23 24 sales information and things that, outside this
09:23 25 courtroom, you wouldn't be allowed to see or I wouldn't

09:23 1 be able to see, and then to this day, Dr. Vasylyev
09:23 2 hasn't been allowed to see.

09:23 3 But we have a different expert, an expert
09:23 4 in economics and finance that it has been allowed by
09:23 5 the Court to see these financials from ASUS. And so we
09:23 6 will present that expert. And he is Dr. Matthew
09:23 7 Farber.

09:23 8 Dr. Farber?

09:23 9 Thank you.

09:23 10 So Dr. Farber will be the one who walks
09:23 11 you through kind of the dollars and cents side of how
09:23 12 ASUS has benefitted. Kind of like Mr. Credelle, an
09:24 13 amazing background in this, he's a patent valuation
09:24 14 expert with access to the right information, and he'll
09:24 15 step you step-by-step through the benefits that ASUS
09:24 16 receives.

09:24 17 He's going to describe how experts in
09:24 18 this field use the law that you will get from
09:24 19 Judge Albright. In particular, you'll hear this case.
09:24 20 It's kind of a famous case that the patent lawyers all
09:24 21 talk about called Georgia-Pacific, where a court laid
09:24 22 out some factors you should consider depending on
09:24 23 what's applicable in your case. And he'll go through
09:24 24 all that.

09:24 25 And that case looks at this thing called

09:24 1 a "hypothetical negotiation." And it's hypothetical
09:24 2 because it never happened, but what you do is sort of
09:24 3 imagine like if ASUS had done the right thing on Day 1
09:24 4 and sat down with us and said, I tell you what, we're
09:24 5 going to use your invention, how much do we need to pay
09:24 6 to do it, you start looking at what would the parties
09:24 7 have negotiated.

09:24 8 It's not a simple math problem. You
09:24 9 can't just sort of compare the cost of one monitor to
09:25 10 another. You can't even just compare the cost of one
09:25 11 monitor to another or even one display panel to
09:25 12 another.

09:25 13 Because think about it. Like, there
09:25 14 might be things like different features, different
09:25 15 sizes, and even the price may have changed over time.
09:25 16 Right?

09:25 17 Like, if you guys have a 50-inch flat
09:25 18 screen you bought this year, it probably cost a little
09:25 19 bit less than if you bought it ten years ago. Things
09:25 20 like that happen, right? So it's pretty complicated,
09:25 21 and crunching the numbers accurately is not a trivial
09:25 22 matter.

09:25 23 So Dr. Farber's going to explain how he
09:25 24 did it, and he performed a sophisticated statistical
09:25 25 analysis called a "regression analysis." And it

09:25 1 statistically hones in on the impact to ASUS of their
09:25 2 infringement.

09:25 3 So what he discovered was that infringing
09:25 4 is great business for ASUS. It turns out ASUS unlocks
09:25 5 about \$21 per monitor they sell in cost savings by
09:26 6 using Dr. Vasylyev's design. And, of course, if a
09:26 7 monitor sells at a given price and your cost drops by
09:26 8 21, that's a good thing if you're ASUS.

09:26 9 Now, you might think --

09:26 10 THE COURT: Counsel, five minutes.

09:26 11 MR. CALDWELL: Thank you, sir.

09:26 12 Now, you might think that if ASUS is
09:26 13 saving \$21 a monitor that SVV should get \$21 a monitor,
09:26 14 but that's not going to be Dr. Farber's opinion. He's
09:26 15 going to explain how he thinks if they sat down and
09:26 16 were to negotiate, they would find an equitable way to
09:26 17 split the savings.

09:26 18 It's, you want to do it. You want to
09:26 19 make some more profit. And we would give you
09:26 20 permission, and you would compensate us.

09:26 21 And at the end of the day, after he goes
09:26 22 through the financials, he'll explain his opinion that
09:26 23 ASUS and SVV would have agreed to pay -- that ASUS
09:26 24 would pay SVV \$13.96 per monitor in order to unlock the
09:26 25 savings, and they get to keep the rest.

09:26 1 Now, as a last data point, you're going
09:27 2 to hear that ASUS sold a whole lot of these monitors.
09:27 3 Okay? I'm -- not dollars. Monitors.

09:27 4 And I don't know if any of you guys are
09:27 5 video gamers, but for some reason when you sell
09:27 6 something to the gaming market, like the price goes up.

09:27 7 And these have the beautiful quantum dots
09:27 8 and fast performance and all these things that are cool
09:27 9 features, and they sell -- they sell well and are very
09:27 10 desirable. Those are not inexpensive monitors. Let me
09:27 11 put it that way. And they sell -- they've sold about
09:27 12 4.2 million monitors that use Dr. Vasylyev's invention.

09:27 13 So once you have the 13.96 and you know
09:27 14 how many monitors they sold, at that point it's kind of
09:27 15 like simple multiplication. That's why we'll be asking
09:27 16 for a reasonable royalty in this case of \$58,632,139.

09:28 17 So what is ASUS going to say? Look, it
09:28 18 bounces around. A few years ago it was, we don't know
09:28 19 our products. Go talk to the vendors. Four days ago
09:28 20 it was, we're happy to have a chance to speak up.

09:28 21 Sometimes it was, we don't know who makes
09:28 22 our monitors. Sometimes it was, we don't know who
09:28 23 makes the panels that are in our monitors. Yet somehow
09:28 24 they manage to sell them and offer warranties on them.

09:28 25 So look. Ultimately, at the end of the

09:28 1 day, our request is that you don't check your common
09:28 2 sense at the door with whatever argument is the
09:28 3 argument of the day.

09:28 4 Sometimes it's been, we have no idea if
09:28 5 our subsidiaries are selling these monitors. But does
09:28 6 that make any sense? It's like we created a subsidiary
09:28 7 in the U.S. We send them monitors. They send us
09:28 8 money. But we don't know if they're selling stuff in
09:28 9 the U.S. We also advertise there and other things. So
09:28 10 I guess we'll see if that argument's still alive.

09:28 11 But now they kind of imply that they've
09:29 12 figured it out, and they've decided they don't
09:29 13 infringe. But remember, they never had a single
09:29 14 problem with the claim charts we sent them three years
09:29 15 ago.

09:29 16 So when all that doesn't work, ASUS will
09:29 17 likely ask you to let them out of this case at a
09:29 18 bargain price. I think you're going to see that's what
09:29 19 they really want in this case, is out at a bargain
09:29 20 price.

09:29 21 They'll probably ask you to give them a
09:29 22 good deal that someone else like Samsung got, or maybe
09:29 23 they'll even try to slice that down further. I guess
09:29 24 we'll see.

09:29 25 But I think you'll see that ASUS'

09:29 1 theories just don't add up. And you're the ones who
09:29 2 get to decide if they do.

09:29 3 As the Court told you last week, you're
09:29 4 the judges of the facts. You're the judges of the
09:29 5 credibility, credibility of the evidence, the witnesses
09:29 6 we bring, and the witnesses they bring.

09:29 7 So no question ASUS has the right to
09:29 8 defend itself. Absolutely not, of course they do. But
09:29 9 they don't have the right to take SVV's technology and
09:29 10 put it in their products and profit handsomely off of
09:30 11 using that invention and pay nothing, when that's
09:30 12 exactly what they try to do.

09:30 13 Please don't check your common sense at
09:30 14 the door. And pay close attention when you see our
09:30 15 experts walk you through the claims, walk you through
09:30 16 the Court's claim construction, and walk you through
09:30 17 the financials, and see who you think's credible.

09:30 18 Thank you for your attention and your
09:30 19 service. I'm so excited we finally get to present the
09:30 20 evidence to you.

09:30 21 Thank you, Your Honor.

09:30 22 THE COURT: You bet.

09:30 23 MR. BURESH: With permission, Your Honor.

09:31 24 THE COURT: Of course.

09:31 25 OPENING STATEMENT ON BEHALF OF THE DEFENDANT

09:31 1 MR. BURESH: Well, good morning again.

09:31 2 I really got to angle this thing up, you
09:31 3 know, it's -- first of all, my voice carries like
09:31 4 nothing, and second of all, I'm taller than some folks.

09:31 5 So let's get started. Okay.

09:31 6 Again, my name is Eric Buresh. I think
09:31 7 that, just to keep everybody on equal parity, I'll do
09:31 8 the same thing that everybody else has done, just the
09:31 9 biographical information.

09:31 10 I have never lived in Texas. You can
09:31 11 probably tell that because my accent's a little
09:31 12 different. I come from up I-35 in Kansas, and I've
09:32 13 lived in Kansas my whole life. In Kansas, I have a
09:32 14 wife of 28 years. Her name is Terah, and she is pretty
09:32 15 much an angel for putting up with me for 28 years while
09:32 16 I run around doing this fun stuff. And my wife and I
09:32 17 have raised four boys together. She's also an angel
09:32 18 for that reason.

09:32 19 My oldest now is married and he lives in
09:32 20 Kansas near me. My second oldest -- first's name is
09:32 21 Ethan. My second is named Noah; he's married and
09:32 22 living in Ohio.

09:32 23 My third is named Grant. He's actually
09:32 24 at school here at Baylor. So I do have some time to --
09:32 25 have had opportunities to be in Waco for reasons other

09:32 1 than a good time with Judge Albright.

09:32 2 My fourth son is still in high school.

09:32 3 He's graduating this year. We nicknamed him Huddy.

09:32 4 His full name is Hudson, but we also call him Closer

09:33 5 because he is the last one. And praise the Lord, he's

09:33 6 the last one.

09:33 7 With that, that's my biographical

09:33 8 information.

09:33 9 And I also wanted to give a little

09:33 10 further introduction to James Lee.

09:33 11 If you could stand up, James.

09:33 12 We've brought James here because he's the

09:33 13 head of the monitor division at ASUS. And he is the

09:33 14 most appropriate person to speak to you about their

09:33 15 monitors and what they do.

09:33 16 You've already heard from my colleague on

09:33 17 the other side that ASUS doesn't manufacture these

09:33 18 monitors, and that is not us pointing fingers. We are

09:33 19 here to answer for the monitors and to present to you

09:33 20 our case that we have put together based upon our

09:33 21 assessment and the engineering that went into these

09:33 22 displays. Okay?

09:33 23 We're not pointing any fingers. We're

09:33 24 not pointing any fingers at any other companies. We

09:33 25 are here to answer. All right? And our answer is

09:33 1 this -- this is my main idea for you folks today in my
09:34 2 roughly 30 minutes.

09:34 3 ASUS does not use Dr. Vasylyev's patents.
09:34 4 That's the main message. We do not use his patents.

09:34 5 We have a firm conviction that that is
09:34 6 the truth. Truth is kind of an interesting word. One
09:34 7 of the things I like about practicing law is that's
09:34 8 what we do. We pursue truth.

09:34 9 There's a lot of symbolism in this
09:34 10 courtroom, including the fact that the Judge sits up on
09:34 11 an elevated bench, because he's in charge. There's
09:34 12 also this big beam that runs across the room, okay,
09:34 13 with the little gate that we walk through. It's called
09:34 14 "the bar."

09:34 15 Now, the bar sets what we're doing apart
09:35 16 from whatever else goes on out in the world. This is a
09:35 17 special place. It's a special place where we come
09:35 18 together to pursue truth. And the fact of the matter
09:35 19 is, you're the deciders. Okay? You're the deciders of
09:35 20 what is going to be true and what is not.

09:35 21 And that can be a complicated job, not
09:35 22 because the truth is complicated. Truth is rarely
09:35 23 complicated. Truth is usually pretty straightforward.
09:35 24 But there can be so much noise. There can be so much
09:35 25 of a cloud of other stuff around it that it's hard to

09:35 1 find.

09:35 2 I grew up in South Central Kansas. And
09:35 3 if -- have y'all driven through Kansas at all? I mean,
09:35 4 it's flatter than a pancake. You can see four horizons
09:35 5 in every direction. There's hardly even a ripple. And
09:35 6 while we don't have a lot of people in Kansas, one
09:36 7 thing we do have a lot of is wheat.

09:36 8 You ever seen wheat fields flowing? They
09:36 9 go on for thousands of acres, and I grew up right in
09:36 10 the middle of that.

09:36 11 So I know wheat. I've driven trucks
09:36 12 where the combines are shooting the grain into the --
09:36 13 into the truck and I take it off to the silos. I grew
09:36 14 up doing that stuff.

09:36 15 Here's the deal. Wheat and chaff. Y'all
09:36 16 ever heard that metaphor before? Separate the wheat
09:36 17 from the chaff. I mean, that metaphor goes back all
09:36 18 the way to the Good Book, goes back way back in time.
09:36 19 Okay?

09:36 20 And here's the deal. When you get wheat,
09:36 21 it's got all this chaff on it, all the husks and all
09:36 22 the things that cover the grain. Back in ancient
09:36 23 times, there was a threshing floor, used to take the
09:36 24 sheaves of wheat, throw it into a threshing floor, and
09:36 25 they'd have cattle or oxen trample over it until it was

09:36 1 all broken up.

09:36 2 Then you'd take your fork, and on a
09:37 3 breezy day, you would throw the combination up in the
09:37 4 air. And what would happen? The wind would blow the
09:37 5 chaff away. And you'd be left with the wheat. Okay?
09:37 6 The good stuff.

09:37 7 That is what we're going to be trying to
09:37 8 help you guys do for the next few days. There's going
09:37 9 to be a whole lot of chaff, and we're going to be
09:37 10 searching for those grains of truth. And the grains of
09:37 11 truth are not that complicated.

09:37 12 Some of the chaff we've -- and it was a
09:37 13 very good opening statement. But there was chaff even
09:37 14 in the opening statement, some things I want you guys
09:37 15 to watch for.

09:37 16 Dr. Vasylyev is -- I mean, he's got more
09:37 17 degrees than you can shake a stick at. He's a
09:37 18 brilliant guy. Our view of the situation is that he's
09:37 19 gotten outside his lane. Okay?

09:38 20 Like, we have lanes that we can be the
09:38 21 most amazing people in the world at. Like talking in
09:38 22 front of people. I can do that pretty easily; some
09:38 23 can't. But if I go try to -- like my colleague here,
09:38 24 he played college football. If I tried to play college
09:38 25 football, I'd get split in two the first time somebody

09:38 1 hit me. I'm not built for that. Right? I'd be
09:38 2 outside my lane.

09:38 3 So what you saw so far, like window
09:38 4 lighting, films, that we were talking about earlier,
09:38 5 what's that have to do with this case? ASUS isn't
09:38 6 making window films. ASUS doesn't make anything that
09:38 7 collects solar light.

09:38 8 I think a little later in the case you're
09:38 9 going to see something called an LED panel that
09:38 10 Dr. Vasylyev developed. It's for lighting commercial
09:38 11 buildings. It's got nothing to do with display
09:39 12 monitors. Okay?

09:39 13 A lot of that stuff is chaff. You've got
09:39 14 to throw it up in the air, let the wind blow it away,
09:39 15 because -- focus on the things we really need to talk
09:39 16 about. Okay?

09:39 17 Some other -- some other chaff that we
09:39 18 heard during the opening from my colleague. Polite
09:39 19 letters back and forth. Okay? We didn't get to see
09:39 20 the whole letter. We're going to see the whole thing
09:39 21 later in this case.

09:39 22 And I'd like to show you just a couple
09:39 23 more pieces that my colleague didn't show you of that
09:39 24 exhibit he flashed up.

09:39 25 Mr. Pubentz.

09:39 1 This is part of that same e-mail chain.
09:39 2 And allegedly, we're pointing our finger at suppliers.
09:40 3 Trying to hide information. Well, look what happens in
09:40 4 this e-mail chain. R. Katz, Robert Katz, that's
09:40 5 Dr. Vasylyev's attorney. Look at what he said.

09:40 6 I appreciate your follow-up. I would
09:40 7 like to continue to discuss with you. However, if you
09:40 8 can provide me with the points of contact for your
09:40 9 panel manufacturers, I'd be happy to contact them
09:40 10 directly, which may help to reduce your role as a
09:40 11 go-between, as you mention, may expedite the process.

09:40 12 Provide some claim charts.

09:40 13 Please let me know if you have any
09:40 14 problem with the charts. I look forward to hearing
09:40 15 from you.

09:40 16 In other words, Dr. Vasylyev's lawyers
09:40 17 asked ASUS to provide information on the panel
09:40 18 manufacturers so that Dr. Vasylyev and his lawyer could
09:40 19 go contact them directly. It's not us pointing the
09:40 20 finger. We're doing what we're asked to do.

09:40 21 That's chaff. You can throw it up in the
09:41 22 air and let the wind blow it away.

09:41 23 We also saw a large TV that I think was
09:41 24 part of the family business or something to that
09:41 25 effect. We've all seen those cathode-ray tube TVs. I

09:41 1 think we're all old enough to have seen those.

09:41 2 And yes, monitors are now thinner. But
09:41 3 here's the deal. ASUS has been selling flat panel
09:41 4 monitors since 2004, 2005 time frame. The industry has
09:41 5 been selling flat panel monitors since before 2000.

09:41 6 When did Dr. Vasylyev's patents come
09:41 7 along? The ones we're going to be talking about in
09:41 8 this case. 2009. I mean, if he's a panel person,
09:41 9 that's Johnny-come-lately. Okay? A little late to the
09:42 10 party on those.

09:42 11 But I had a question when I was listening
09:42 12 to the opening. If Dr. Vasylyev is responsible for
09:42 13 taking those big TVs and getting them down to a flat
09:42 14 panel monitor, why aren't we seeing that? Like, where
09:42 15 was the flat panel monitor that Dr. Vasylyev has put
09:42 16 together?

09:42 17 And I'm not saying manufacture millions
09:42 18 of them or anything like that. Show me a prototype.
09:42 19 Okay? But you haven't seen one of those. Because he's
09:42 20 not in that lane. It's just a lot of chaff. So watch
09:42 21 for that.

09:42 22 What is the truth, the kernels I want you
09:42 23 to watch for?

09:42 24 I can't prove my case in an opening
09:42 25 statement. Ten, 15 years ago, I tried once to prove my

09:42 1 case in an opening statement. It didn't work. Hasn't
09:42 2 worked anytime since. But I want to preview some
09:43 3 things for you so that you can follow along better.

09:43 4 All right?

09:43 5 Could I have the ELMO, please? Thank
09:43 6 you.

09:43 7 This is a pro tip, okay, as you're in
09:43 8 your role as jurors. There's going to be a lot of
09:43 9 slides flashing around. Those are not going to be with
09:43 10 you back in the -- in the jury room. Okay? So if you
09:43 11 see something as we go through slides that you think is
09:43 12 important, take a note down. If you're interested in
09:43 13 doing that. Okay? Just giving you a fair warning,
09:43 14 they're not going to be there.

09:43 15 You do, however, have in your notebooks
09:43 16 the patents in this case. And anytime you want, you
09:43 17 can look at those while we're going through them and
09:43 18 follow along, because these patents are pretty useful.
09:43 19 Right? They're the patents that are in the case.
09:43 20 They're good evidence.

09:43 21 And here's the thing. These patents were
09:44 22 written in the 2009, 2010 time frame, before
09:44 23 Dr. Vasylyev was on his campaign to come after display
09:44 24 people like us. Okay? So the words in these were
09:44 25 prelawsuit. So they're worth looking at. All right?

09:44 1 I'm going to start with the '318 patent.
09:44 2 And if you see in your juror notebook, and you want to
09:44 3 find a patent, the number's right up here, '318.

09:44 4 Y'all with me?

09:44 5 This here is called the title of the
09:44 6 patent. Okay? This is a Light-Trapping Optical Cover.

09:44 7 You see that?

09:44 8 Now I'm showing you the '089 patent. And
09:45 9 if you go with me to the title, we see Light-Converting
09:45 10 System Employing Planar Light-Trapping and
09:45 11 Light-Absorbing Structures.

09:45 12 We're going to call these two patents,
09:45 13 when we work through this case -- it's going to be
09:45 14 pretty creative. Ready? -- the "light-trapping
09:45 15 patents." Okay? It's right in the title. Light
09:45 16 trapping.

09:45 17 Now, here's what I want you to watch for.
09:45 18 If you're going down to Best Buy, okay, and you're
09:45 19 looking for a display monitor like this one or the ones
09:45 20 that are in front of y'all, are you going to walk down
09:45 21 the aisle and say, Mr. or Mrs. Best Buy employee, can
09:45 22 you show me the displays that trap light inside of
09:46 23 them?

09:46 24 Anybody going to ask that? Okay. This
09:46 25 is not church. When I ask rhetorical questions, I

09:46 1 don't expect you to raise your hands. All right?

09:46 2 Here's the deal. Solar panels trap
09:46 3 light. Because the sun comes down. The light goes in.
09:46 4 It gets converted and absorbed into electricity and
09:46 5 it's gone. Light's gone. We now have electricity.
09:46 6 That's what solar collectors do. It's not what
09:46 7 displays do.

09:46 8 If you have a display that traps light,
09:46 9 you know what you're going to get? A black screen.
09:46 10 Because all we see is light. We don't actually see --
09:46 11 like this piece of wood in front of you, you're not
09:46 12 actually seeing that piece of wood. You're seeing
09:46 13 light reflecting off that piece of wood.

09:47 14 If you shut and trap light in a display,
09:47 15 it's not a display. Okay? That's true. We don't use
09:47 16 light-trapping systems.

09:47 17 And before I leave those two, ladies and
09:47 18 gentleman, I just want to add, when we look through
09:47 19 these patents, you're not going to see a single mention
09:47 20 of a display or a monitor or anything like that.
09:47 21 They're just not about that. Dr. Vasylyev and his
09:47 22 lawyers are outside their lane.

09:47 23 Two more patents. This is the second
09:47 24 kernel of truth I want you to watch for.

09:47 25 These two patents are -- we call them

09:47 1 "related." The technical term is a "continuation."
09:47 2 Right? That means they have the same specifications,
09:47 3 the words, the same figures. The claims of these
09:48 4 patents are different. All right?

09:48 5 So I'm going to show you the '342. Okay?
09:48 6 The '342 patent is titled The Collimating Illumination
09:48 7 System.

09:48 8 Now, I want to give Dr. Vasylyev and his
09:48 9 team some credit here. These patents actually do put
09:48 10 light out. Okay? They're not trapping it in like the
09:48 11 others. They started from a light-trapping system.
09:48 12 And you heard counsel on the other side talk about
09:48 13 this. It's called the "reversibility of light." Okay?

09:48 14 Now, I'm going to go real deep here.
09:48 15 We're going to look at a figure. If you turn with me
09:48 16 or just follow along on the screen, these are the
09:49 17 figures. Okay?

09:49 18 Now, if we look at Figure 13. And you
09:49 19 can take notes on your patents all you want. So
09:49 20 everybody had a chance to turn there if they want to.

09:49 21 Okay. Here's light in Figure 13 coming
09:49 22 into this system from the top like that. It's hitting
09:49 23 some optical elements. If we track this one through,
09:49 24 it will hit this deflecting feature down here, and then
09:49 25 the light is all bouncing this way. Okay?

09:49 1 Over here, 45, we have a solar cell.

09:49 2 That's light trapping, okay, where you're sucking up
09:50 3 the light, turning it into energy.

09:50 4 Now, this reversibility of light concept,
09:50 5 I've got to turn back a few figures. If you could join
09:50 6 me at Figure 27.

09:50 7 Everyone have a chance to join me there?
09:50 8 Thank you.

09:50 9 Now, here, instead of a solar cell, we
09:50 10 have a light source over here. Okay? So we're not
09:50 11 sucking the light in. Now we're pushing the light out.
09:50 12 But the light follows the reverse path. It heads this
09:50 13 way. Eventually hits one of these deflectors and gets
09:50 14 shot up like this.

09:50 15 Y'all see that? That's called
09:50 16 "collimating light." "Collimating" is like a 50-cent
09:51 17 word. Right? It just means putting out light in
09:51 18 narrow beams. Narrow beams.

09:51 19 Here's my question for you as you watch
09:51 20 the evidence: Do you want narrow beams of light coming
09:51 21 out of a display monitor? Is that what you're looking
09:51 22 for when you go to Best Buy? Because I can tell you
09:51 23 the result of that.

09:51 24 If you're sitting, watching your TV --
09:51 25 switch to a pen here -- and you're sitting in this

09:51 1 area, you will be okay. Okay? Because you can see
09:51 2 some light. It might not be great because it's coming
09:51 3 out in beams, but you can at least see it.

09:51 4 But now slide down your couch, all right,
09:51 5 to your recliner that's at the end of the couch. And
09:52 6 we're going to sit ourselves over here. Anybody see a
09:52 7 problem? We are not okay.

09:52 8 Here's the truth: You can reverse light
09:52 9 all day long from a solar collector, but simply pumping
09:52 10 light out of a solar collector backwards does not make
09:52 11 for a good display design at all.

09:52 12 These monitors from -- I mean, even the
09:52 13 ones in the courtroom, but like you're going to see
09:52 14 from my client, they go for the widest viewing angle
09:52 15 possible. That means they are spraying light
09:52 16 everywhere they can.

09:52 17 Our monitors are spec'd to a 178-degree
09:52 18 viewing angle. That's side to side, top to bottom.
09:52 19 What does that mean, to help you orient? Can y'all see
09:52 20 this display up here? I'm straight on. This would be,
09:53 21 you know, coming straight out. But can you see this
09:53 22 monitor from an angle? Yes.

09:53 23 It's 178 degrees. So you can be almost
09:53 24 beside it. I'm sorry, ladies. I know you can't see
09:53 25 it. But you can be almost beside it and see monitors

09:53 1 because they're blasting light out all over the place.

09:53 2 Monitors do the exact opposite of
09:53 3 collimating light. They scatter the light from the
09:53 4 very get-go. The design that Dr. Vasylyev came up with
09:53 5 to reverse light just doesn't work for monitors.
09:53 6 That's the truth.

09:53 7 Now, I'm going to come back to this
09:53 8 point. We've heard that Dr. Vasylyev's designs
09:53 9 improved the lighting. They reduce energy consumption.
09:53 10 They improve the color of light.

09:53 11 Where's the evidence of any of that?
09:53 12 Where will it be? We would need to see something,
09:54 13 right, to show us that that's the case.

09:54 14 My dad grew up in Missouri before he
09:54 15 moved to Kansas. Anybody know the slogan of the
09:54 16 Missouri -- of the state of Missouri? It's the
09:54 17 "Show-Me" state. It's still on the license plate.

09:54 18 And I remember back in the day, my mom
09:54 19 used to take me to church every Sunday, and I say my
09:54 20 mom because my dad was already there. My mom would
09:54 21 take me to church, and she'd let me sit in the seats.
09:54 22 This is when I was a little kid, like eight, nine years
09:54 23 old. I had to actually listen when I got older.

09:54 24 But then she gave me a bulletin, she gave
09:54 25 me a hymnal, and she gave me a pencil. And one of the

09:54 1 things I'd like to do is draw plans for paper airplanes
09:54 2 while I sat listening to the service.

09:54 3 When I came out of the service and talked
09:54 4 to my dad, I'd say, Dad, this thing -- this glider that
09:54 5 I've drawn is going to be awesome. It's the most
09:54 6 amazing glider that I've ever drawn.

09:55 7 You know what my dad would do? Well,
09:55 8 son, you're going to have to show me. He didn't let me
09:55 9 brag about anything. You're going to have to show me.
09:55 10 And he thought that was funny because he's coming from
09:55 11 the state of Missouri.

09:55 12 But here's the deal. It's right.

09:55 13 You can say stuff all day long if you
09:55 14 never build it. If you never try your idea, you can
09:55 15 say whatever you want about it, but you can't prove it
09:55 16 because there's nothing to show. Okay? His design
09:55 17 does not work for display monitors.

09:55 18 We're going to have Dr. Goossen.

09:55 19 If you could stand up.

09:55 20 This is our expert. Okay? He's been in
09:55 21 the industry for 35 years. He's a professor. He works
09:55 22 at the University of Delaware. He's a good teacher.
09:55 23 He's in the classroom all the time. He's going to do
09:55 24 his very best to explain the details of all this to
09:55 25 you. Okay?

09:55 1 But those are the kernels of truth.

09:56 2 Another kernel of truth that I want you

09:56 3 to look for, there are no partners in this case. We

09:56 4 heard during voir dire from my colleague that

09:56 5 Dr. Vasylyev has found partners. They're not partners.

09:56 6 Samsung --

09:56 7 THE COURT: Counsel, you have five

09:56 8 minutes.

09:56 9 MR. BURESH: Thank you very much,

10 Your Honor.

09:56 11 Samsung that you heard about a little bit

09:56 12 from my colleague, they were sued, just like ASUS, by

09:56 13 Dr. Vasylyev. Samsung made the decision to settle

09:56 14 their lawsuit. That's not a partner.

09:56 15 We are very excited and proud to present

09:56 16 our case to you, but I can tell you, we're not happy to

09:56 17 be here. You don't want to get sued when you wake up

09:56 18 in the morning. It's not a good feeling. But when you

09:57 19 are, when you're accused, you defend yourself.

09:57 20 Samsung made the choice of settlement.

09:57 21 [REDACTED]

09:57 22 [REDACTED] Okay? You're going to see the evidence of
09:57 23 that.

09:57 24 Here's the deal. Samsung we've all heard

09:57 25 of. They're a huge company. TVs, display monitors,

09:57 1 phones, all that. Their relevant sales for their
09:57 2 products are 40 times larger than my client's. 40
09:57 3 times larger. [REDACTED]

09:57 4 [REDACTED] Okay? Fraction of the size,
09:57 5 paying a multiple more. On what planet does that make
09:57 6 sense?

09:57 7 You've heard about regressions. I hear
09:58 8 the term "regression," I'll tell you what I think
09:58 9 about. Political polls. Regressions are used all the
09:58 10 time in political polls.

09:58 11 Here's something we know about political
09:58 12 polls: Regardless of what side you're on, they're not
09:58 13 right. We've seen entire elections go the other way
09:58 14 from what the polls were saying.

09:58 15 Because here's the truth. Whoever's
09:58 16 paying for the poll gets whatever result they want.
09:58 17 Because you can pay people to put garbage in and get
09:58 18 garbage out. The simple truth is, look at what happens
09:58 19 in the real world. Because we know that in this case.
09:58 20 We know that.

09:58 21 But don't be confused here. When I talk
09:58 22 about Samsung and that stuff like that, it's not
09:58 23 because I think we infringe. We don't. But put
09:58 24 yourself in our shoes. If you were accused of
09:58 25 infringement and there's these -- or accused of

09:59 1 anything and there's these other kind of big pile of
09:59 2 stuff that goes along with it, you say no to all of it.

09:59 3 Wouldn't you?

09:59 4 And that's what we're doing here. But
09:59 5 don't forget the main idea. The main idea is this:
09:59 6 ASUS does not use Dr. Vasylyev's patents. That's the
09:59 7 plain and simple truth.

09:59 8 When I stand back up in, let's say, three
09:59 9 days, that's what I'm going to ask you to find. That's
09:59 10 what I'm going to ask you to decide is the truth.
09:59 11 Follow along with us. Toss the stuff up that you hear.
09:59 12 See what the wind blows away. Stay focused on the
09:59 13 truth.

09:59 14 Thank you very much.

09:59 15 THE COURT: Thank you, sir.

09:59 16 Counsel, do you have a witness?

09:59 17 MR. MCCARTY: Your Honor, plaintiffs call
09:59 18 Dr. Sergiy Vasylyev.

10:00 19 (The witness was sworn.)

10:00 20 DIRECT EXAMINATION

10:00 21 BY MR. MCCARTY:

10:01 22 Q. Good morning.

10:01 23 A. Good morning.

10:01 24 Q. Would you please introduce yourself to the
10:01 25 jury?

10:01 1 A. Sure. My name is Sergiy Vasylyev.

10:01 2 Q. Are you a Dr. Vasylyev?

10:01 3 A. Yes, sir. I have Ph.D. in physics and
10:01 4 mathematics.

10:01 5 Q. And what is your role in this case, sir?

10:01 6 A. I'm here to testify about my company and my
10:01 7 technologies.

10:01 8 So I'm the CEO and the founder of SVV, and I'm
10:01 9 also the inventor on the patents at issue in this case.

10:01 10 Q. You mentioned that you're the inventor on the
10:01 11 patents, correct?

10:01 12 A. That is correct.

10:01 13 Q. Now, during Mr. Buresh's opening statement,
10:01 14 when he was showing the patents, he showed the title.

10:01 15 Do you recall that?

10:01 16 A. Yes. I do, sir.

10:01 17 Q. He showed a couple figures.

10:01 18 Do you recall that?

10:01 19 A. Yes, sir.

10:01 20 Q. Did he go through the patent claims in the
10:02 21 patent?

10:02 22 A. Not at all, sir.

10:02 23 Q. When the jury's determining infringement in
10:02 24 this case, do they look at the title of the patent or
10:02 25 do they look at the claims of the patent?

10:02 1 A. They look at the claim. The claims.

10:02 2 Q. You mentioned your company is SVV.

10:02 3 Where's that company based?

10:02 4 A. We're based in Sacramento, California.

10:02 5 Q. Is that accent of yours from Sacramento?

10:02 6 A. Oh, no, no. I've lived in the United States
10:02 7 for about 25 years, but I was originally born in
10:02 8 Eastern Europe. So I'll try to speak, like, slowly so
10:02 9 the jury can understand me better.

10:02 10 Q. Are you a U.S. citizen?

10:02 11 A. Oh, yes.

10:02 12 Q. Okay. How long have you been a citizen for?

10:02 13 A. Next March it'll be 19 years. I remember the
10:02 14 date quite well. That was a very important event in my
10:02 15 life.

10:02 16 Q. What about your company, SVV, is that a U.S.
10:02 17 company?

10:02 18 A. Yes. It is a U.S. company.

10:02 19 Q. Tell us about SVV. What kind of company is
10:03 20 it? What does it do?

10:03 21 A. Yeah. So we are an innovation company. Our
10:03 22 products and technology is a range from, like,
10:03 23 commercial lighting to some bigger projects like
10:03 24 energy, including, like, solar energy that we receive
10:03 25 from the sun.

10:03 1 Q. What kind of -- actually, as the founder and
10:03 2 CEO of that company, are you kind of on a day-to-day
10:03 3 more on the technical side, or do you work on the
10:03 4 business side with the books and the accounting and all
10:03 5 that?

10:03 6 A. Yeah, obviously as the CEO, I take, like, a
10:03 7 lot of business, you know, responsibilities, but my
10:03 8 real passion is in the technology.

10:03 9 Q. And when did you create this company?

10:03 10 A. In the -- 2000, so it was 24 years ago.

10:03 11 Q. And who are some of SVV's customers on the
10:03 12 commercial side?

10:03 13 A. So our customers depend on the projects, so
10:03 14 you ask me about the commercial customers. Some
10:03 15 examples include, like, Corning Incorporated, OptoGlo,
10:04 16 Acuity Brands.

10:04 17 Q. This may sound a little bit different, but are
10:04 18 some of SVV's customers governments and utility
10:04 19 companies?

10:04 20 A. Yes. So some examples would be like federal
10:04 21 governmental agencies, also state governmental
10:04 22 agencies, and some municipal entities as well.

10:04 23 Q. Did you bring some slides that we can look at
10:04 24 today to help the jury?

10:04 25 A. Yes.

10:04 1 MR. MCCARTY: Could you put that up,
10:04 2 Mr. Diaz? Thanks.

10:04 3 BY MR. MCCARTY:

10:04 4 Q. So what are you showing on the screen here?

10:04 5 A. So this is our office there in Sacramento.

10:04 6 Q. It says Lucent Optics on the top. What's that
10:04 7 all about?

10:04 8 A. So when I started my company 24 years ago, I
10:04 9 named it SVV because these are just my initials, and at
10:04 10 the time it was just me.

10:04 11 But over time, I just wanted a better brand
10:04 12 that would better describe the focus of my company and
10:05 13 also be, you know, more memorable by the -- our
10:05 14 customers. And, basically, "lucent" means glowing with
10:05 15 light.

10:05 16 Q. And what are those logos on the right, then,
10:05 17 next to your -- next to your building?

10:05 18 A. Yeah. These are some of our past customers
10:05 19 that I mentioned before, like Corning, Acuity Brands,
10:05 20 and others.

10:05 21 Q. And has your company won any awards for its
10:05 22 technology?

10:05 23 A. Yes. And I list just a couple on the bottom.

10:05 24 Q. What's the -- you know, pick one -- what's the
10:05 25 TechConnect award about?

10:05 1 A. So we won that national innovation award, and
10:05 2 that award recognizes technologies that can make big
10:05 3 impacts on specific industry sectors.

10:05 4 Q. Are these some of your company's products?

10:05 5 A. Yes, sir.

10:05 6 Q. Can you just walk us through and talk about
10:05 7 them?

10:05 8 A. Yeah, so these are just some examples. So on
10:05 9 the left you can see our mobile solar energy appliance.
10:06 10 It's unique in that it allows to capture the free
10:06 11 energy from the sun and produce both heat and
10:06 12 electricity at the same time.

10:06 13 And in the middle are -- you see our window
10:06 14 film, which we call Daylighting Fabric. It's also
10:06 15 unique in a way because if you put it on a window, it
10:06 16 redirects the daylight, the free energy from the sun,
10:06 17 towards the ceiling and deep into the space so your
10:06 18 space can be illuminated more brightly using natural
10:06 19 light, and you can reduce your reliance on electrical
10:06 20 light.

10:06 21 And on the right, it's one of our -- another
10:06 22 innovation, which is a flexible LED lighting panel.
10:06 23 It's essentially the world's first flexible LED panel
10:06 24 and also the industry's thinnest in that category.

10:07 25 MR. MCCARTY: Mr. Diaz, would you be able

10:07 1 to go to my client's website?

2 BY MR. MCCARTY:

10:07 3 Q. So that's lucentoptics.com, right, sir?

10:07 4 A. Lucentoptics.com, right.

10:07 5 MR. MCCARTY: If you'd go to the
10:07 6 Innovation tab, that'd be good. It's on the top there.

10:07 7 Thank you.

8 BY MR. MCCARTY:

10:07 9 Q. In opening statements, I think ASUSTeK's
10:07 10 lawyer mentioned that your business, quote, has nothing
10:07 11 to do with backlights or displays.

10:07 12 Did you hear that?

10:07 13 A. Yes, sir. Very clearly.

10:07 14 Q. Yeah, and some of the innovations here,
10:07 15 what --

10:07 16 MR. MCCARTY: If you go up a little bit.

17 BY MR. MCCARTY:

10:07 18 Q. -- on the right, what is that talking about
10:07 19 there, sir?

10:07 20 A. It says: Advanced light coupling and
10:07 21 oucoupling for LCD displays.

22 Q. And it says: Helping improve the brightness
10:07 23 of LCD displays using advanced backlight
10:07 24 configurations. Correct?

10:07 25 A. That is correct.

10:07 1 Q. Are the products at issue in this case LCD
10:07 2 displays?

10:07 3 A. They're not.

10:07 4 Q. They're LCD monitors, correct?

10:07 5 A. Right. I mean, they -- the products in this
10:08 6 case, yes, LCD monitors, yeah.

10:08 7 Q. With backlights?

10:08 8 A. Yes. They include backlights as the main
10:08 9 component.

10:08 10 Q. Thank you.

10:08 11 MR. MCCARTY: You can go back to our
10:08 12 slides, Mr. Diaz.

10:08 13 BY MR. MCCARTY:

10:08 14 Q. You mentioned that SVV also works in
10:08 15 collaboration with some kind of governmental entities.
10:08 16 Can you talk about some of those projects?

10:08 17 A. Yeah. Sure. So some of our partners have
10:08 18 been quoted, the United States Department of Energy,
10:08 19 also the National Science Foundation and California
10:08 20 Energy Commission, and some others as well.

10:08 21 Q. Can you give us an example -- let's just pick
10:08 22 one. Let's do the U.S. Department of Energy. Can you
10:08 23 tell us about one of the projects that you worked on
10:08 24 with them?

10:08 25 A. Yeah. Sure. So that project actually

10:08 1 included our LED -- flexible LED lighting panel that --
10:08 2 similar to what we just saw on one of the previous
10:08 3 slides.

10:08 4 So we proposed our LED lighting panel to
10:09 5 replace the old and bulky fluorescent fixtures, the
10:09 6 lights that you can oftentimes see, like, in the
10:09 7 ceilings, like in office buildings and the like.
10:09 8 There's, like, more energy efficient and cheaper
10:09 9 technology.

10:09 10 And the Department of Energy determined that
10:09 11 our technology was innovative and potentially
10:09 12 impactful, and they actually funded this project to
10:09 13 develop this technology.

10:09 14 Q. Was the project a big success?

10:09 15 A. It was huge success. Yes. The Department of
10:09 16 Energy liked the technology and also the outcome of
10:09 17 that project. And they even came back just this last
10:09 18 summer and awarded us with two more projects to develop
10:09 19 our manufacturing capabilities and also some
10:09 20 applications of these panels.

10:09 21 Q. Thank you.

10:09 22 I may be outing myself as like not knowing a
10:09 23 lot about how that process works, but is it competitive
10:09 24 when you're talking about working with some entity like
10:10 25 the U.S. Department of Energy?

10:10 1 A. It is extremely competitive. There are many
10:10 2 companies applying and they all have some competitive
10:10 3 technologies, and the success rate to get this funding
10:10 4 is very, very low.

10:10 5 Q. And they picked SVV?

10:10 6 A. Yes, sir.

10:10 7 Q. So now that we know a bit about your company,
10:10 8 can we learn about you?

10:10 9 A. Yes. Absolutely.

10:10 10 Q. How old are you, sir?

10:10 11 A. I'm 56.

10:10 12 Q. Are you married? Do you have kids?

10:10 13 A. Yes. I have a wife and two sons; ages 23 and
10:10 14 28.

10:10 15 Q. What does your wife do?

10:10 16 A. She has a science background just like me.
10:10 17 This is how we met. We had physics class together.
10:10 18 And after working as a schoolteacher for a while, and
10:10 19 also besides raising our kids, she also helps run SVV
10:10 20 with me. Mostly on the administrative side.

10:10 21 Q. What about your sons? Are they following your
10:10 22 (sic) dad's footsteps and becoming scientists?

10:11 23 A. Yeah, quite a bit. At least partially. So my
10:11 24 older son is starting astrophysics towards his Ph.D. at
10:11 25 the University of California in Berkeley. And my

10:11 1 younger son just graduated with master's degree in
10:11 2 technology management from the University of California
10:11 3 in Santa Barbara.

10:11 4 Q. Congratulations.

10:11 5 A. Thank you.

10:11 6 Q. Did those boys give you and your wife any
10:11 7 grandbabies yet?

10:11 8 A. Not yet, but my wife keeps her fingers crossed
10:11 9 that this will happen soon.

10:11 10 Q. And where do you live?

10:11 11 A. I live in Elk Grove. It's a small town near
10:11 12 Sacramento.

10:11 13 Q. Where'd you grow up?

10:11 14 A. I grew up in Eastern Europe, and this is where
10:11 15 my accent comes from.

10:11 16 Q. When you were growing up, what'd your parents
10:11 17 do?

10:11 18 A. They both were scientists, actually. And they
10:12 19 studied astrophysics, and my father eventually became a
10:12 20 university professor and my mom became an engineer.

10:12 21 Q. When you were growing up, was your family
10:12 22 wealthy?

10:12 23 A. Oh, not at all. No. Actually, when I was
10:12 24 young, we couldn't even afford dining out. It wasn't
10:12 25 until both of my parents obtained their Ph.D.s, it's

10:12 1 only then we could start going to, like, a restaurant.
10:12 2 And only on special occasions. Just to give an
10:12 3 example.

10:12 4 Q. What made times hard at that, you know, period
10:12 5 of history for a family like yours?

10:12 6 A. Well, at that point of time and the place
10:12 7 where I lived, there was very little money. And the
10:12 8 government basically controlled and owned everything.

10:12 9 Q. What did you want to be when you grew up?

10:12 10 A. I wanted to be a great scientist just like my
10:12 11 dad.

10:12 12 Q. What are you showing here?

10:12 13 A. It is actually me and my dad. I'm just about
10:13 14 like two years old here, apparently inspecting the
10:13 15 telescope.

10:13 16 Q. Did you share his passion for studying
10:13 17 physics?

10:13 18 A. Yes. Sure.

10:13 19 Q. Were you a good student?

10:13 20 A. Yes. So I shared his passion in science, in
10:13 21 physics and optics and especially in light and ways of
10:13 22 studying light. And I think I was a good student. I
10:13 23 received some scholarship -- actually, almost always
10:13 24 received scholarships based on my academic achievement
10:13 25 and also later received very prestigious fellowship in

10:13 1 my field.

10:13 2 Q. What are your degrees in again?

10:13 3 A. So my -- I have a master's in physics and
10:13 4 astronomy and also a Ph.D. in physics and mathematics.

10:13 5 Q. Did you develop some specialities in the
10:13 6 field?

10:13 7 A. Yes.

10:13 8 Q. And what are those in?

10:13 9 A. I became an expert in optics and light,
10:14 10 especially in the ways of using light in different
10:14 11 innovative ways.

10:14 12 Q. And what does the field of light encompass?

10:14 13 A. Well, light is actually a very big field of
10:14 14 technology. And if you -- when people think about
10:14 15 light, they might think like of sunlight or a light
10:14 16 bulb, but it -- the science of light is actually much
10:14 17 more complicated.

10:14 18 Q. So let's ask the million-dollar question:
10:14 19 What is light?

10:14 20 A. Well, light in simple terms can be described
10:14 21 as an electromagnetic wave that moves from one place to
10:14 22 another.

10:14 23 Q. Are all light waves the same?

10:14 24 A. Not at all. And that's actually how we
10:14 25 perceive the colors.

10:14 1 Q. So what are we seeing here?

10:14 2 A. So it's like longer wavelengths of light give
10:14 3 you those like oranges and red that you can see on the
10:14 4 bottom, and the shorter wavelengths give you like the
10:14 5 blue and purple, for example.

10:14 6 Q. Are all electromagnetic waves visible to the
10:15 7 humans as colors on that spectrum?

10:15 8 A. No. Actually, the spectrum is so broad, and
10:15 9 there are portions of that spectrum that are invisible
10:15 10 to the human's eye, for example, radio waves.

10:15 11 Q. Is that what you're showing here on the
10:15 12 screen?

10:15 13 A. Yes. That is a broader spectrum.

10:15 14 Q. Now, we've been talking about light as like a
10:15 15 single oscillating wave.

10:15 16 Is light a little bit more complicated than
10:15 17 that?

10:15 18 A. It is much more complicated. It actually
10:15 19 includes many different wavelengths and also many waves
10:15 20 that are mixed together.

10:15 21 Q. Can you help the jury understand a little bit
10:15 22 about how light behaves?

10:15 23 A. Right. So light actually can be very
10:15 24 difficult to control at times because it behaves
10:15 25 differently based on the object it encounters.

10:16 1 Q. Okay. So let's look at a beam of light here.
10:16 2 Let's say we emit a beam of light from a light source.
10:16 3 Does it go on forever?

10:16 4 A. Yeah. So if you emit a beam of light like
10:16 5 that, it can propagate very long distances until it
10:16 6 strikes an object.

10:16 7 Q. What do you mean by "an object" or "an
10:16 8 obstacle"?

10:16 9 A. Well, for example, we have like a smooth and
10:16 10 shiny surface like glass. Light will just bounce off
10:16 11 it at the same angle against the surface.

10:16 12 Q. Is there a hypertechnical scientific term for
10:16 13 something that reflects light?

10:16 14 A. A mirror.

10:16 15 Q. Okay. All right. Now, what are you showing
10:16 16 here that's a little bit different?

10:16 17 A. It's another fascinating property and behavior
10:16 18 of light. It's when it meets a boundary between one
10:16 19 optical medium and another, like between two different
10:16 20 materials, it bends.

10:16 21 Q. And is that called "refraction"?

10:16 22 A. And it is called "refraction."

10:16 23 Q. And what makes light -- a light wave bend in
10:17 24 refraction?

10:17 25 A. So when the light travels from one medium to

10:17 1 another, the speed of light changes and that's what --
10:17 2 that causes light to bend.

10:17 3 Q. Doesn't all light move at the same speed of
10:17 4 light?

10:17 5 A. Yes. But the speed of light actually depends
10:17 6 on the medium. So, for example, the speed of light in
10:17 7 air is different than the speed of light in water.

10:17 8 Q. Is a lens a common device for refracting
10:17 9 light?

10:17 10 A. That would be a very common popular device.

10:17 11 Q. Okay. Is there another behavior of light that
10:17 12 relates to reflection and refraction that you want to
10:17 13 talk about?

10:17 14 A. Yes. And yet another fascinating and
10:17 15 important property of light is the so-called "total
10:17 16 internal reflection."

10:17 17 Q. Can you describe what total internal
10:17 18 reflection is?

10:17 19 A. Right. So this is a phenomenon that occurs
10:17 20 when the light strikes a denser medium and actually
10:17 21 strikes a boundary of it. After a certain angle, it no
10:18 22 longer refracts but instead can reflect back into the
10:18 23 medium without exiting.

10:18 24 Q. Can you kind of describe what we're seeing on
10:18 25 the screen here?

10:18 1 A. Yeah. So as we see here, the light strikes
10:18 2 the top surface. And as you move the, you know, angle
10:18 3 of light further, it still reflects inside without
10:18 4 exiting, without escaping.

10:18 5 Q. And if we add another surface maybe on the
10:18 6 bottom, what are we seeing here? Does the TIR continue
10:18 7 on on the top and the bottom?

10:18 8 A. Right. This phenomenon, the TIR, which is
10:18 9 short for the total internal reflection, occurs at both
10:18 10 surfaces. And this is how you can trap light and let
10:18 11 it propagate long distances without having it to
10:18 12 escape.

10:18 13 Q. Now that we have the basics, how are these
10:18 14 concepts used in various applications?

10:19 15 A. So these mechanisms and these properties and
10:19 16 behaviors of light are very, very useful in different
10:19 17 applications, including the backlights for LCD
10:19 18 supplies.

10:19 19 Q. Now, we talked about your background. We got
10:19 20 some kind of technical basics down about light. I want
10:19 21 to hear about how you came to start SVV, the company.

10:19 22 A. Sure.

10:19 23 Q. Did that have something to do with you coming
10:19 24 to the United States?

10:19 25 A. Yes. Actually, that is what coming to United

10:19 1 States has allowed me to do.

10:19 2 Q. Tell me about that transition from where you
10:19 3 were born and grew up to the United States.

10:19 4 A. Right. So as I mentioned, I was born outside
10:19 5 of the United States, and I came here about 25 years
10:19 6 ago. And I started my company shortly after I came.

10:19 7 Q. And about what year was that and who came
10:19 8 over?

10:19 9 A. Yeah. So I came here in 1999, and it was just
10:20 10 me, my wife, and our older son, who at that time was
10:20 11 just a little baby.

10:20 12 Q. Was that difficult leaving your home, your
10:20 13 family, and kind of coming to the United States with
10:20 14 just your wife and your newborn baby?

10:20 15 A. Yes. It was extremely difficult. So we had
10:20 16 to leave our families, our friends, our belongings,
10:20 17 pretty much everything.

10:20 18 Q. What were you looking for in kind of dropping
10:20 19 everything and coming here?

10:20 20 A. American dream.

10:20 21 Q. And what does that mean to you?

10:20 22 A. To me, it means to live in a place where I
10:20 23 could raise my family in a safe neighborhood, where my
10:20 24 kids can get a good education, when there is a freedom,
10:20 25 which is important, where I could also innovate in my

10:20 1 scientific field and create new technologies and
10:20 2 products that improve other businesses and enhance
10:21 3 lives of other people. And where if I work hard and do
10:21 4 the right things, I could build a better life for my
10:21 5 family.

10:21 6 Q. Did you want to own your own business?

10:21 7 A. Yes. I have always wanted to have my own
10:21 8 business.

10:21 9 Q. So once you got to the United States, did you
10:21 10 start your company, SVV?

10:21 11 A. Yes. I started shortly after arriving to the
10:21 12 United States.

10:21 13 Q. And did you hit it big right away?

10:21 14 A. Not at all. This is actually when all the
10:21 15 hard work was just beginning.

10:21 16 Q. So right away, if you weren't able to make
10:21 17 enough money to put food on the table early on, did you
10:21 18 have to take on other jobs and opportunities?

10:21 19 A. Yeah. So I had to take parallel jobs just to
10:21 20 make ends meet.

10:21 21 Q. So when you first got here, you started a
10:21 22 company.

10:21 23 What other jobs did you do in order to make
10:21 24 ends meet?

10:21 25 A. Yeah. For example, I was hired by the

10:22 1 Sacramento County Sheriff's Department to fix their
10:22 2 emergency dispatch system, which was basically failing
10:22 3 and was causing a lot of officers and public safety
10:22 4 issues.

10:22 5 Q. So how could a young light scientist like
10:22 6 yourself, at the time, help fix a security system for
10:22 7 the sheriff's department in Sacramento?

10:22 8 A. Yeah. So what happened was that that system
10:22 9 was almost entirely software based, and I happened to
10:22 10 have a very deep expertise in software development.
10:22 11 And also knew that if I put enough effort, I would be
10:22 12 able to do it.

10:22 13 Q. And did you fix the system for them?

10:22 14 A. Yes. That was a successful job, and I was
10:22 15 able to fix that system. And that system had run after
10:22 16 that for a number of years.

10:22 17 Q. So while you were working at the sheriff's
10:22 18 department in Sacramento, did you have any time left
10:22 19 over for the company, SVV?

10:22 20 A. Very little. So I had to work nights and, you
10:23 21 know, many, many hours after my daytime job to actually
10:23 22 continue working for SVV and innovating in my field.

10:23 23 Q. So you're working sort of a 9:00 to 5:00
10:23 24 ordinary job, and then in the nights and weekends in
10:23 25 the garage with SVV?

10:23 1 A. Yes.

10:23 2 Q. At some point in time, did you guys have your
10:23 3 first big achievement at SVV?

10:23 4 A. Yes. For example, we have developed a first
10:23 5 of a kind solar concentrator.

10:23 6 Q. Did you prototype that design?

10:23 7 A. Yes. And we build that product, a working
10:23 8 prototype of that.

10:23 9 Q. What are we seeing on the screen here?

10:23 10 A. So on the left you see me holding that
10:23 11 prototype. It's the concentrator, which is called
10:23 12 "slat" or a "concentrator." And on the right, it's my
10:23 13 dad and I next to a smaller version of similar
10:23 14 concentrator that we built together.

10:23 15 Q. I think I know the answer. I can tell by the
10:23 16 fashion. But was this the early days of SVV?

10:24 17 A. Yeah. It was like in mid-2000s.

10:24 18 Q. And so does this solar concentrator receive
10:24 19 any recognition in the industry?

10:24 20 A. Yes. Write-ups, like in the local magazines.
10:24 21 Also, it was noted by many researchers in the solar
10:24 22 industry field. So they referenced our developments,
10:24 23 and also we received some awards. And we've got two
10:24 24 U.S. patents for that and received some research grants
10:24 25 for that as well.

10:24 1 Q. What are you showing here?

10:24 2 A. So these are some of the local magazines that
10:24 3 I mentioned that wrote about my -- our company and our
10:24 4 technology.

10:24 5 Q. What was so notable about the original solar
10:24 6 concentrator prototype that y'all had made?

10:24 7 A. So it was managing light very efficiently, and
10:24 8 we were able to make it such that it didn't waste any
10:24 9 light.

10:24 10 Q. How did this -- or how did you design this
10:25 11 concentrator to work so efficiently with the light?

10:25 12 A. We spent actually years iterating and
10:25 13 employing different tools and also expanding and
10:25 14 prototyping. And one of the tools we used was the
10:25 15 so-called optical modeling and ray tracing.

10:25 16 Q. Can you show us what that looks like?

10:25 17 A. Yeah. So that's example how like ray tracing
10:25 18 works, where we essentially trace the behavior of
10:25 19 thousands and thousands of light waves through our
10:25 20 system.

10:25 21 Q. Is this another example of that ray tracing?

10:25 22 A. Yes. It is. And this one is specifically for
10:25 23 light collecting application.

10:25 24 Q. And as you were working on all this optical
10:25 25 modeling, what did you discover as it relates to

10:25 1 applying your inventions to the emission of light like
10:25 2 in lighting displays?

10:25 3 A. That the same principles can be equally
10:25 4 applied for whether you want to collect light or you
10:25 5 want to emit light.

10:26 6 Q. And does that refer to the inventions that
10:26 7 we're here in court for today?

10:26 8 A. Yes, sir.

10:26 9 Q. Can you help us understand those inventions?

10:26 10 A. Yes. Will be happy to.

10:26 11 Q. When you were first starting your research,
10:26 12 what did the --

10:26 13 THE COURT: Counsel, this seems like a
10:26 14 good breaking place.

10:26 15 MR. MCCARTY: It'd be great. Yeah.
10:26 16 Thank you.

10:26 17 THE COURT: Ladies and gentleman, a
10:26 18 couple of things. We take a break, a recess, in the
10:26 19 morning and in the afternoon of 10 or 15 minutes.
10:26 20 Whenever we take a break, whether it's during the day
10:26 21 or this evening when you go home, there are a couple of
10:26 22 rules you have to abide by.

10:26 23 The first is that you can't talk about
10:26 24 the case until you begin deliberating on Friday. I
10:26 25 don't care what else you talk about. If it were me,

10:26 1 I'd talk about the Longhorns winning or the Cowboys
10:26 2 losing. But that's me, not you. So -- but you're free
10:26 3 to talk about whatever you want.

10:26 4 Number two, my sons who are in college
10:26 5 tell me there's social media. I'm unfamiliar with it,
10:27 6 but I'm aware that it exists. I'm not saying you can't
10:27 7 be on social media, but please don't post anything
10:27 8 about the trial while you're serving on the jury.

10:27 9 And finally, the technology that we are
10:27 10 hearing about is fascinating to me. But the lawyers
10:27 11 have worked extremely hard to put together their views
10:27 12 of the case to present it to you here in the courtroom.
10:27 13 So don't feel like you'll be helping them by going and
10:27 14 doing your own research.

10:27 15 What the lawyers want and what I'm
10:27 16 instructing you to do is to listen to the evidence
10:27 17 that's presented this week and make your decision based
10:27 18 only on the evidence and not any independent research
10:27 19 that you might want to perform on your own.

10:27 20 From now on I'll just say: Please
10:27 21 remember my instructions. But those are what the
10:27 22 instructions are. So we'll take a short recess and
10:27 23 we'll be back in about 10 or 15 minutes.

10:27 24 THE BAILIFF: All rise.

10:27 25 (Jury exited the courtroom.)

10:28 1 THE COURT: You may be seated.

10:28 2 Doctor, you may step down.

10:28 3 My sense is that we have --

10:28 4 This doesn't need to be on the record.

10:28 5 (Off-the-record discussion.)

10:28 6 THE COURT: Anything we need to take up?

10:28 7 MR. BURESH: No, Your Honor. Thank you.

10:28 8 (Recess taken.)

10:45 9 THE BAILIFF: All rise.

10:45 10 THE COURT: Please remain standing for

10:45 11 the jury.

10:45 12 (Jury entered the courtroom.)

10:45 13 THE COURT: Thank you. You may be

10:45 14 seated.

10:45 15 Doctor, you may be seated.

10:45 16 Counsel?

10:45 17 MR. MCCARTY: Thank you, Your Honor. May

10:45 18 I proceed?

10:45 19 THE COURT: Please.

10:45 20 MR. MCCARTY: All right.

10:45 21 BY MR. MCCARTY:

10:45 22 Q. So picking up where we left off, when you were

10:45 23 first starting your research, what did display

10:45 24 technology look like?

10:46 25 A. Yeah. At that time the displays were mostly

10:46 1 like large and bulky and very, very inefficient. And
10:46 2 the -- you can, you know, judge the bulkiness, like
10:46 3 based on this picture, for example.

10:46 4 Q. What made those old large, like, TV screens in
10:46 5 this instance, very large and bulky?

10:46 6 A. They required like different projection kind
10:46 7 of optics to direct light towards the screen so that
10:46 8 the images and -- light and images could be brought
10:46 9 towards you, and also they required the bulky and
10:46 10 inefficient light sources.

10:46 11 Q. And so how did those old systems work on some
10:46 12 of those older displays?

10:46 13 A. So the light source was illuminating different
10:46 14 optical components, and that light was redirected
10:46 15 towards the screen so you can see images on it.

10:46 16 Q. At some point did the industry start moving
10:46 17 away from those older systems to something thinner?

10:47 18 A. Yes.

10:47 19 Q. And what are you showing there on the back
10:47 20 labeled LEDs? What are those?

10:47 21 A. This is the so-called full array, a full LED
10:47 22 array backlight where you use a bunch of small light
10:47 23 sources called "LEDs" arranged in rows and columns to
10:47 24 illuminate that screen.

10:47 25 Q. Did the transition to LEDs in screens cause

10:47 1 any problems?

10:47 2 A. It was causing initially a lot of problems
10:47 3 even though the intent was to make thinner displays,
10:47 4 but actually, using the LEDs in that way created hot
10:47 5 spots on the screen and various non-uniformities.

10:47 6 Q. So why did the introduction of LEDs cause
10:47 7 inconsistencies in light on the screen like hot spots?

10:47 8 A. Because you can think of LED, which stands for
10:47 9 light-emitting diode, as a very concentrated light
10:47 10 source in a small package. And when you have them at
10:48 11 distances from one another, it will create these hot
10:48 12 spots on the screen, like a series of like brighter
10:48 13 areas and darker areas that would be very unpleasant.

10:48 14 Q. So what were these manufacturers doing to
10:48 15 avoid hot spots?

10:48 16 A. So they had to keep a distance between the
10:48 17 LEDs and the screen. And in addition to that, they had
10:48 18 to use a bunch of, like, costly optical components
10:48 19 called "diffusers" which added to the cost and also
10:48 20 prevented them to actually make really thin displays.

10:48 21 Q. Did your technology help solve these problems?

10:48 22 A. Yes. It does, sir.

10:48 23 Q. Okay. What is one aspect of your technology
10:48 24 that you introduced?

10:48 25 A. Well, I didn't focus on array-based LEDs.

10:48 1 Instead I used like a single strip of LEDs along one
10:48 2 edge of the display. And that would be called
10:48 3 "edge-lit LED backlight system."

10:49 4 Q. If you'd transition from like the full array
10:49 5 grid of lights to just an edge, does that mean that
10:49 6 like only the bottom of the screen in this instance
10:49 7 would be illuminated?

10:49 8 A. Yes. And that was one of the biggest problems
10:49 9 initially.

10:49 10 Q. So how did you address that?

10:49 11 A. So I used the very specialized optical device
10:49 12 which is called "optical waveguide" that I used to
10:49 13 actually take that light from the LEDs and spread it
10:49 14 evenly across the entire screen. And that what created
10:49 15 uniform illumination on the screen.

10:49 16 Q. Were you the first person ever to use a
10:49 17 waveguide?

10:49 18 A. No, sir.

10:49 19 Q. What are two ways that your waveguide helped
10:49 20 solve the problems that we just walked through?

10:49 21 A. So it was a very special kind and
10:49 22 concentration of the waveguide. For the first time it
10:49 23 used like microstructures on the bottom and formed in a
10:50 24 pattern. And also, these microstructures were coupled
10:50 25 to parallel lenses formed in the top surface of that

10:50 1 waveguide.

10:50 2 Q. So we've got two there. Let's start with the
10:50 3 first one, the microstructures on the bottom.

10:50 4 Can you describe the role of the
10:50 5 microstructures in the waveguide?

10:50 6 A. Yeah. Sure. So microstructures I used to
10:50 7 actually take that light out of the waveguide and
10:50 8 direct towards the lenses.

10:50 9 Q. In this example, what are some important
10:50 10 features of the microstructures?

10:50 11 A. So by using these microstructures, especially
10:50 12 when they're arranged in the ways I invented, you can
10:50 13 spread light evenly over long distance over large
10:50 14 display area and extract it from the waveguide and emit
10:50 15 towards you in a very uniform way.

10:50 16 Q. Are these microstructures in some sort of
10:50 17 pattern?

10:51 18 A. Yes. They're formed in a pattern.

19 (Clarification by Reporter.)

10:51 20 BY MR. MCCARTY:

10:51 21 Q. And is the pattern -- can there be a random
10:51 22 pattern or an irregular pattern?

10:51 23 A. My patterns display different kinds of
10:51 24 patterns, but it include regular patterns and also
10:51 25 includes random or randomized patterns as well.

10:51 1 Q. And how can something be a randomized pattern?
10:51 2 Those seem like opposites of one another.

10:51 3 A. Right. So basically there needs to be a
10:51 4 pattern to be able to control how you extract and emit
10:51 5 that light to make the system efficient. But also, you
10:51 6 need the pattern to be randomized so that you avoid
10:51 7 different unpleasant visual effects like nonuniformity,
10:51 8 so you can make the light vary and very uniform.

10:51 9 Q. What else did you pair and align with those
10:51 10 microstructures?

10:51 11 A. So I paired those microstructures with the
10:52 12 linear cylindrical lenses which are arranged in
10:52 13 parallel in the top surface of the waveguide.

10:52 14 Q. And how do the microstructures align with the
10:52 15 parallel lenses on top?

10:52 16 A. Right. So they're aligned relatively to
10:52 17 other -- one another, and that allows you to direct
10:52 18 light better towards the screen.

10:52 19 Q. And we talked about collimation a little bit
10:52 20 in opening.

10:52 21 Is it important to have some collimation on
10:52 22 these products?

10:52 23 A. Well, it -- there are circumstances when the
10:52 24 collimation is important. And for the most part, yes.
10:52 25 It is important because it allows you to -- not only to

10:52 1 more efficiently use light but also to make the display
10:52 2 brighter.

10:52 3 But it doesn't mean that all light has to go
10:52 4 towards like a perpendicular, towards one direction.
10:52 5 No. It still go to different direction and still be
10:52 6 considered collimated.

10:52 7 Q. Can you show us how this waveguide would work
10:53 8 using a figure from your patents?

10:53 9 A. Absolutely.

10:53 10 Q. Okay. So what are you showing on the right
10:53 11 here? Is that a figure from one of your patents?

10:53 12 A. Yes. It's like a colored figure from my
10:53 13 patent, and you can see these microstructures on the
10:53 14 left side which are numbered with -- as 14.

10:53 15 Q. And what are you showing on the top there,
10:53 16 like the little white kind of semicircle on the top?

10:53 17 A. So that is our light source, which can be LED,
10:53 18 the light-emitting diode.

10:53 19 Q. What happens when you turn that LED on?

10:53 20 A. So that LED actually sends light towards the
10:53 21 edge of the waveguide, and that light propagates
10:53 22 through the waveguide, is extracted by those
10:53 23 microstructures, directed to the lenses, and the lenses
10:53 24 then further collimate and direct light better towards
10:53 25 the display.

10:53 1 Q. Let's slow that down a little bit.

10:53 2 First, focusing on the two aspects we
10:53 3 discussed earlier, where are the microstructures in
10:53 4 this example?

10:53 5 A. In this example on the right, so they're shown
10:54 6 like on the left, leftmost surface. And they're
10:54 7 numbered 14.

10:54 8 Q. And what about the lenses?

10:54 9 A. And these are shown on the right side, and the
10:54 10 numbers are 6.

10:54 11 Q. And it looks like there's a gap in the middle.
10:54 12 Does there have to be a gap there?

10:54 13 A. No. It doesn't have to be. It's just one of
10:54 14 these implementations. But also in my patents, I
10:54 15 describe implementations where there's no gap at all.

10:54 16 Q. So those can be directly adjacent to one
10:54 17 another?

10:54 18 A. Yes. It can be made as a monolithic
10:54 19 structure.

20 Q. So let's play that animation again, but let's
21 go slowly this time. And can you explain what's
10:54 22 happening?

10:54 23 A. Right. So you see like these individual lines
10:54 24 which we call "light rays." And so those light rays
10:54 25 propagate through the light guide because they're

10:54 1 received on the edge. And then they propagate far
10:54 2 enough until they heat these microstructures.

10:54 3 And the microstructures are designed in a
10:54 4 special way to redirect that light towards the lenses
10:55 5 so that the light can be further shaped and the
10:55 6 diversions angle can be controlled better and directed
10:55 7 better towards the screen so you can see the images
10:55 8 more clearly and higher brightness.

10:55 9 Q. So if we kind of zoom in to really figure out
10:55 10 what's going on, why is that light not shooting off to
10:55 11 the right when it hits that first surface?

10:55 12 A. Yeah. Remember I was talking about the
10:55 13 fascinating property of light, the total internal
10:55 14 reflection. This is actually what is happening here.
10:55 15 So we have the total internal reflection of the surface
10:55 16 of the waveguide. So light does not escape; instead,
10:55 17 remains trapped in the light guide.

10:55 18 Q. Is that what the trapping can refer to?

10:55 19 A. Yes. That can refer to this particular
10:55 20 mechanism as well.

10:55 21 Q. I see that it -- a layer called "quantum
10:55 22 dots."

10:55 23 Does that refer to the colorful vials that
10:55 24 Mr. Caldwell showed to the jury in opening?

10:55 25 A. Yes, sir. It does.

10:55 1 Q. Okay. And how does your invention and
10:55 2 waveguide pair with those quantum dots?

10:56 3 A. Yes. So if you add a layer that contains
10:56 4 these quantum dots, then you can significantly improve
10:56 5 the color gamuts of the images that you see on the
10:56 6 screen.

10:56 7 Q. What is a quantum dot?

10:56 8 A. So quantum dot is a very, very small particle
10:56 9 called a "nanoparticles." And that they -- the color
10:56 10 they emit light depends on the size of that
10:56 11 nanoparticle.

10:56 12 Q. Why are you showing the red, green, and blue
10:56 13 dots here?

10:56 14 A. Because in order to make the so-called RGB
10:56 15 displays -- displayed -- and this is the type of
10:56 16 displays that are currently made -- you need like three
10:56 17 colors, like red, green, and blue.

10:56 18 So theoretically, you would need like three
10:56 19 types of quantum dots, but in the actual displays,
10:56 20 because the blue quantum dots are very expensive to
10:57 21 make, you can use just blue backlight, blue LEDs, for
10:57 22 example, and only use two remaining colors.

10:57 23 Quantum dot -- quantum dots is two remaining
10:57 24 colors, like green and red. And this is how you still
10:57 25 can make RGB display.

10:57 1 Q. Are there some other attempts around the same
10:57 2 time as you at solving similar problems?

10:57 3 A. Yes. There were lots of attempts.

10:57 4 Q. And what were some of the problems with
10:57 5 others -- others' attempted solutions?

10:57 6 A. Yeah. So they use like different types of
10:57 7 light guides, different shapes, configurations. And
10:57 8 for the most part, they were like using this jagged
10:57 9 surfaces which were not efficient at guiding light and
10:57 10 were not useful for creating large displays with
10:57 11 uniform emission in this high efficiency.

10:57 12 Q. And what about on the prisms on the right?
10:57 13 What's wrong with that?

10:57 14 A. So some developers also tried to add prisms to
10:58 15 those waveguides, but that didn't work well either
10:58 16 because prisms are -- were used like to disperse light.
10:58 17 But they're not useful for controlling light in the way
10:58 18 that would be useful for displays.

10:58 19 Q. Now, did you hear in opening about how ASUSTeK
10:58 20 said they have been making screens since like the early
10:58 21 2000s?

10:58 22 A. Yes, sir. I do remember.

10:58 23 Q. I'm about to get to the patents.

10:58 24 Roughly, when did you file for your original
10:58 25 patents? What years?

10:58 1 A. It was in 2009.

10:58 2 Q. Okay. And what were the state of the displays
10:58 3 around that time?

10:58 4 A. Yeah. So at that time, most displays were
10:58 5 bulky and inefficient. And even though there were
10:58 6 already some so-called flat panel displays on the
10:58 7 market, they were still not as thin as they are today.
10:59 8 And they were very inefficient. And they were not even
10:59 9 using for the most part LEDs. They were using instead
10:59 10 the so-called fluorescent tubes.

10:59 11 Q. So the products at the time were using
10:59 12 fluorescent tubes?

10:59 13 A. Yes. For the most part.

10:59 14 Q. Did you bring an example product of SVV's that
10:59 15 you can walk through with the jury to show your
10:59 16 breakthroughs?

10:59 17 A. Yes, sir.

10:59 18 MR. MCCARTY: Your Honor, can the witness
10:59 19 leave the witness stand and show the demonstrative?

10:59 20 THE COURT: Sure.

10:59 21 MR. MCCARTY: Thank you.

10:59 22 BY MR. MCCARTY:

10:59 23 Q. Okay. So what are we looking at here, sir?

10:59 24 A. So we're looking at the flexible LED lighting
11:00 25 panel that we have developed and are proud of the --

11:00 1 you know, being manufactured in the United States.

11:00 2 Q. And what makes this panel sort of interesting
11:00 3 and special?

11:00 4 A. There are many things. First of all, it is
11:00 5 flexible. Then it is transparent, as you can see.
11:00 6 Then it is extremely lightweight. It also uses very
11:00 7 few raw materials, and the components for making this
11:00 8 panel are relatively inexpensive. So it saves the cost
11:00 9 of making this panel, and it's very efficient.

11:00 10 Q. And what happens when you turn it on?

11:00 11 A. It becomes -- when you turn it on, it becomes
11:00 12 a very uniform, super bright, beautiful light source
11:00 13 that can be used in many, many applications from just
11:00 14 general lighting to LCD displays and the like.

11:00 15 Q. And are there actual lights sort of on the
11:01 16 screen or on the film where it's all lit up, or are
11:01 17 there light sources elsewhere?

11:01 18 A. And that's the beauty of this design, is that
11:01 19 there are no light sources across the area. So all
11:01 20 light sources, which are in this case LEDs, are located
11:01 21 in this -- within these narrow strips at the edges.

11:01 22 Q. So is this an edge-lit panel?

11:01 23 A. This is an edge-lit panel.

11:01 24 Q. Thank you.

11:01 25 Now, how does the light, once it comes from

11:01 1 the edge, kind of get emitted, you know, across the
11:01 2 whole -- across the whole film?

11:01 3 A. So the secret sauce here is that it includes a
11:01 4 pattern, a specially designed pattern of
11:01 5 microstructures which are distributed over the surface
11:01 6 of the waveguide. So you have a waveguide and the
11:01 7 large number of microstructures, possibly millions of
11:01 8 them.

11:01 9 Q. And are those perfectly precisely patterned in
11:01 10 a random fashion?

11:01 11 A. So there is -- it is a pattern, but at the
11:02 12 same time it is a randomized pattern.

11:02 13 Q. Thank you.

11:02 14 So did this product of yours win any awards or
11:02 15 recognition in the industry?

11:02 16 A. Yes, sir. For example, the well-known
11:02 17 Illuminating Engineering Society has recognized this
11:02 18 product as a unique and significant advancement in the
11:02 19 art and science of lighting.

11:02 20 Q. And what would this product be used for?

11:02 21 A. So this product would be useful for a variety
11:02 22 of applications. They range from like replacing
11:02 23 fluorescent pictures and making them more efficient and
11:02 24 also more beautiful for, you know, in appearance, also
11:02 25 for backlighting like in the LCD displays or like LED,

11:02 1 like different -- different devices that you can use
11:02 2 for advertising and so on. So many, many applications.

11:02 3 Q. Thank you.

11:02 4 Is this related to that big project that you
11:02 5 were working on with the Department of Energy?

11:03 6 A. Yes. It is.

11:03 7 Q. And did the Department of Energy like this
11:03 8 technology?

11:03 9 A. They liked it very much. And actually, they
11:03 10 even wrote a success story about that project. And
11:03 11 they even came up and -- with a follow-up funding to
11:03 12 further develop this technology and also its
11:03 13 applications.

11:03 14 Q. And what was one of the big advantages of this
11:03 15 technology?

11:03 16 A. It's reducing the cost and also saving energy.

11:03 17 Q. Thank you.

11:03 18 You can set that down and we'll get back.

11:03 19 So thank you for that.

11:03 20 One of the benefits you mentioned was the
11:03 21 cost. What are some of the technical benefits that are
11:03 22 sort of unlocked by your inventions?

11:03 23 A. So you can get brighter light sources of that
11:04 24 large size. You can also improve significantly
11:04 25 efficiency and -- which applies equally to the LCD

11:04 1 displays and lighting. But for displays particularly,
11:04 2 you can reduce the size of the bezel on the display.
11:04 3 You can also make this panel more uniform. And again,
11:04 4 very importantly, high brightness and low cost.

11:04 5 Q. Thank you.

11:04 6 Now, once you had these inventions, did you
11:04 7 apply for patent protection at the Patent Office?

11:04 8 A. Yes. I did.

11:04 9 Q. Why?

11:04 10 A. Because I wanted to protect my ideas before
11:04 11 starting working on making products out of them.

11:04 12 Q. Did you go hire a lawyer?

11:04 13 A. Initially I did, but very soon after filing
11:04 14 for patent -- patent applications, I do the process on
11:05 15 my own.

11:05 16 Q. Why did you decide to handle patent
11:05 17 prosecution yourself?

11:05 18 A. Well, so far -- first, it was extremely
11:05 19 expensive. I didn't have enough money. And second, I
11:05 20 thought if I put enough effort, I would be able to do
11:05 21 it on my own and actually happened to be successful in
11:05 22 that.

11:05 23 Q. Now, in the spring of 2009, did you write and
11:05 24 file at the Patent Office what's called a provisional
11:05 25 patent application?

11:05 1 A. Correct. It was in April 2009.

11:05 2 Q. Was that provisional application

11:05 3 No. 61/214,331?

11:05 4 A. Yes, sir.

11:05 5 Q. Okay. If you would, please, turn in your

11:05 6 binder to Tab 1.

11:05 7 A. Okay. I'm here.

11:05 8 Q. Is this a copy of that provisional patent

11:05 9 application that you drafted and filed?

11:05 10 A. Yes, sir.

11:05 11 MR. MCCARTY: Your Honor, plaintiff moves

11:06 12 PTX-5 for admission into evidence.

11:06 13 MR. BURESH: No objection.

11:06 14 THE COURT: Admitted.

11:06 15 MR. MCCARTY: Mr. Diaz, would you please

11:06 16 pull that exhibit up for us?

11:06 17 BY MR. MCCARTY:

11:06 18 Q. Did this initial provisional application

11:06 19 discuss the structure of your waveguide that we just

11:06 20 walked through?

11:06 21 A. Yes, sir.

11:06 22 MR. MCCARTY: Mr. Diaz, would you go to

11:06 23 Figure 12 on this application?

11:06 24 BY MR. MCCARTY:

11:06 25 Q. Is this your waveguide right here, sir?

11:06 1 A. Yes, sir.

11:06 2 Q. Now, did you file a second provisional just
11:06 3 shortly into the next year in March of 2010?

11:06 4 A. Yes. Around that time, just a few months
11:06 5 later.

11:06 6 Q. And is that Application 61/339,512?

11:06 7 A. That is correct.

11:06 8 Q. If you would, please, turn in your binder to
11:06 9 Tab 2.

11:06 10 A. Yes.

11:06 11 Q. Is that document at Tab 2 a copy of that
11:06 12 provisional patent application?

11:06 13 A. Yes. Exactly.

11:06 14 MR. MCCARTY: Okay. Your Honor,
11:06 15 plaintiff moves PTX-6 for admission into evidence.

11:06 16 MR. BURESH: No objection.

11:07 17 THE COURT: Admitted.

11:07 18 BY MR. MCCARTY:

11:07 19 Q. Why did you file a second provisional
11:07 20 application?

11:07 21 A. Because I wanted to add some more features to
11:07 22 the original patent applications that I wrote, and also
11:07 23 I include some additional applications for that
11:07 24 technology.

11:07 25 Q. And did you continue to file additional

11:07 1 applications?

11:07 2 A. Yes. I filed many more.

11:07 3 Q. Was one of the additional provisional

11:07 4 applications Application No. 61/399,552?

11:07 5 A. Yes, sir.

11:07 6 Q. Okay. Was that provisional filed just shortly

11:07 7 after these two that we just looked at?

11:07 8 A. Yes.

11:07 9 Q. Now, after you had those patent filings then
11:07 10 with the Patent Office, was SVV comfortable then going
11:07 11 out and trying to commercialize some of its lighting
11:07 12 solutions?

11:07 13 A. Yes. At the time, yes.

11:07 14 Q. And what steps were you taking?

11:07 15 A. So I did -- tried many things. I attended
11:08 16 trade shows. I talked to manufacturers. I talked to
11:08 17 potential partners, to some larger corporations as
11:08 18 well. I tried to raise funding. So I did a lot of
11:08 19 activities on that.

11:08 20 Q. Were you successful kind of breaking into that
11:08 21 industry right then?

11:08 22 A. Not quite.

11:08 23 Q. Okay. Why do you think so?

11:08 24 A. Well, I encountered like a sort of resistance
11:08 25 from like bigger industry players to work with smaller

11:08 1 companies like mine and consider these ideas that are
11:08 2 not coming from them internally or somewhere else.

11:08 3 Q. Do you remember any instances that come to
11:08 4 mind during that time period?

11:08 5 A. Yeah. I talked to companies like 3M, Dell,
11:08 6 DuPont, Flextronics, and many others.

11:08 7 Q. But during this time, the patent filing was
11:08 8 working its way through the Patent Office, right?

11:08 9 A. Correct.

11:08 10 Q. So eventually, did you receive some good news
11:08 11 in October of 2012?

11:09 12 A. Yes.

11:09 13 Q. Okay. What happened in that time?

11:09 14 A. So the first patent in the group of patents in
11:09 15 this case was finally issued by the United States
11:09 16 Patent Office.

11:09 17 Q. And if you'd turn to Tab 4 in your binder in
11:09 18 front of you, is that a copy of that first issued
11:09 19 patent, U.S. 8,290,318?

11:09 20 A. Yes, sir.

11:09 21 MR. MCCARTY: Your Honor, plaintiff moves
11:09 22 JTX, Joint Exhibit 1 into evidence.

11:09 23 MR. BURESH: No objection.

11:09 24 THE COURT: Admitted.

11:09 25 BY MR. MCCARTY:

11:09 1 Q. Do you remember what it felt like knowing that
11:09 2 the Patent Office after three years had examined your
11:09 3 patent and granted you that patent right?

11:09 4 A. Yes. I do remember that quite well. I felt
11:09 5 extremely happy and proud of my accomplishment.

11:09 6 MR. MCCARTY: Mr. Diaz, would you mind
11:09 7 putting that one up on the screen?

11:09 8 BY MR. MCCARTY:

11:09 9 Q. If you zoom into the top there, it says United
11:09 10 States patent. And below it is your name, correct?

11:09 11 A. Yes, sir. It is.

11:09 12 Q. What are those numbers on the right?

11:10 13 A. So on the right it's like a numeric identifier
11:10 14 of the patent, which is unique to each patent. But
11:10 15 it's kind of mouthful. So we usually like use a --
11:10 16 refer to them by the last three numbers, which would be
11:10 17 '318 in this case.

11:10 18 Q. And did the Patent Office subsequently grant
11:10 19 the three other patents in this case following the
11:10 20 issuance of this patent?

11:10 21 A. Yes, sir.

11:10 22 Q. And did you feel the same sense of pride and
11:10 23 accomplishment when those were granted?

11:10 24 A. I felt extremely proud.

11:10 25 Q. And are those later three patents U.S.

11:10 1 9,880,342, 10,439,089, and 10,627,562?

11:10 2 A. Yes, sir.

11:10 3 Q. Would you mind turning in your binder to
11:10 4 Tabs 5 through 7 and have a look at those patents?

11:10 5 A. 5 through 7?

11:10 6 Q. 5, 6, and 7.

11:11 7 A. 5, 6, and 7.

11:11 8 Yes, sir.

11:11 9 Q. Are those the three remaining patents in the
11:11 10 case, sir?

11:11 11 A. Those are three other patents, yes.

11:11 12 MR. MCCARTY: Your Honor, plaintiff moves
11:11 13 Joint Exhibit 2, Joint Exhibit 3, and Joint Exhibit 4
11:11 14 for admission into evidence.

11:11 15 MR. BURESH: No objection.

11:11 16 THE COURT: Admitted.

11:11 17 MR. MCCARTY: Mr. Diaz, why don't we take
11:11 18 a look at one of those? If you could go to JTX-4.

11:11 19 Thank you.

11:11 20 BY MR. MCCARTY:

11:11 21 Q. Is this one of the four patents in the case,
11:11 22 sir?

11:11 23 A. Yes, sir.

11:11 24 Q. And which one is this?

11:11 25 A. This is the '562 patent.

11:11 1 Q. And right there on the front cover, it's got a
11:11 2 figure down at the bottom.

11:11 3 Do you recognize that figure?

11:11 4 A. Yes.

11:11 5 Q. And what's that figure?

11:11 6 A. This is actually the essence of our invention,
11:11 7 which is an illumination system that uses LED and the
11:11 8 waveguide. So it's edge-lit system that uses the
11:11 9 microstructures and lenses working in tandem.

11:12 10 Q. I think we heard in opening from ASUSTeK's
11:12 11 lawyer a statement that the patent does not mention
11:12 12 displays or backlights.

11:12 13 Did you hear that?

11:12 14 A. I hear that very clearly.

11:12 15 Q. Okay.

11:12 16 MR. MCCARTY: Mr. Diaz, could you go in
11:12 17 this patent of Dr. Vasylyev's to Columns 3 and 4?
11:12 18 And just maybe zoom in on the top half of this page.

11:12 19 BY MR. MCCARTY:

11:12 20 Q. And in these patents, sir, just to orient the
11:12 21 jury to what we're looking at, what are these words on
11:12 22 the page here? Is this sort of the description?

11:12 23 A. Yes.

11:12 24 Q. And if you look here on Column 3, do you see
11:12 25 in the middle paragraph there the discussion about LED

11:12 1 technology?

11:12 2 A. Yes. I see that.

11:12 3 Q. And it's in the context of illumination
11:12 4 systems?

11:12 5 A. Yes, sir.

11:12 6 Q. Okay. Is illumination system the same as a
11:13 7 solar concentrator?

11:13 8 A. No. It's complete opposite.

11:13 9 Q. And what's at issue in this case?

11:13 10 A. Yes. These are illumination systems. Because
11:13 11 the backlights used in those monitors are illumination
11:13 12 systems.

11:13 13 Q. LED illumination system?

11:13 14 A. They're LED-based and waveguide-based
11:13 15 illumination systems.

11:13 16 Q. And if you go in there, and I guess it'd be
11:13 17 Column 4, just to the right of where you highlighted
11:13 18 and a little bit down at about Line 17, 18, 19, do you
11:13 19 see where it talks about backlight and projection
11:13 20 display systems?

11:13 21 A. Yes, sir.

11:13 22 Q. Okay. Are backlight display systems at issue
11:13 23 in this case?

11:13 24 A. Yes, sir. These are backlighting -- backlight
11:13 25 systems.

11:13 1 Q. Thank you.

11:13 2 Did you also --

11:13 3 MR. MCCARTY: You can take that down,

11:13 4 Mr. Diaz.

5 BY MR. MCCARTY:

11:13 6 Q. Did you also ensure that the patents were

11:13 7 properly assigned from you personally over to your

11:13 8 company, SVV?

11:13 9 A. Yes. I made sure that this was done

11:13 10 correctly.

11:13 11 Q. Could you turn to the back of your binder?

11:14 12 It's at Tabs 15, 16, and 17.

11:14 13 A. Yes, sir.

11:14 14 Q. And what are these documents at 15, 16, and

11:14 15 17?

11:14 16 A. So these are the documents that assign the

11:14 17 patents to the -- to my company from me being the

11:14 18 inventor.

11:14 19 Q. And you have knowledge of these documents?

11:14 20 A. Yes, sir.

11:14 21 MR. MCCARTY: Your Honor, plaintiffs move

11:14 22 the assignment documents for the case, PTX-12, PTX-13,

11:14 23 PTX-14, into evidence.

11:14 24 MR. BURESH: No objection.

11:14 25 THE COURT: Admitted.

11:14 1 BY MR. MCCARTY:

11:14 2 Q. Okay. Thank you.

11:14 3 All right. Now, at some point in time, sir,
11:14 4 did you begin to suspect that other companies were
11:14 5 implementing your patented technologies into their
11:14 6 products?

11:14 7 A. Yes. I did.

11:14 8 Q. How did you form that belief?

11:14 9 A. Mostly by coincidence. So I just was looking
11:14 10 at the, like, displays on the market and started
11:14 11 noticing some, you know, improvements and changes and
11:15 12 which were exhibiting some of the hallmarks of my
11:15 13 patented technology.

11:15 14 Q. And what were some of those hallmarks?

11:15 15 A. Like the displays were getting thinner,
11:15 16 brighter, more uniform, and they had like -- were
11:15 17 having like smaller, thinner bezels at the edges and
11:15 18 several others. And they were also becoming more and
11:15 19 more efficient.

11:15 20 Q. And did you get your hands on some and look
11:15 21 inside to see what technology they were using?

11:15 22 A. Right. So I was curious and just I wanted to,
11:15 23 you know, take a few apart and see what actually those
11:15 24 manufacturers were doing.

11:15 25 Q. And what did you find?

11:15 1 A. I found that some of those manufacturers were
11:15 2 not using their own technology but instead, they
11:15 3 adopted my patented technology.

11:15 4 Q. Can you give us an example of three companies
11:15 5 that were using your technology?

11:15 6 A. Yes. So those would be, for example, ASUS,
11:15 7 Samsung, and also Micro-Star, or MSI.

11:16 8 Q. Now, those three companies, have any of them
11:16 9 licensed or gotten permission to use your technology?

11:16 10 A. Yes, sir. Two of them.

11:16 11 Q. Who?

11:16 12 A. Samsung and MSI.

11:16 13 Q. Okay. Let's start with Samsung.

11:16 14 Did you enter into an agreement with Samsung
11:16 15 to license your patents?

11:16 16 A. Yes, sir. They took a license to use it.

11:16 17 Q. Okay. How did that agreement come to be?

11:16 18 A. Oh, it just --

11:16 19 MR. BURESH: Your Honor, may we approach
11:16 20 momentarily?

11:16 21 THE COURT: Sure.

11:16 22 (Bench conference.)

11:16 23 MR. BURESH: This is getting into
11:16 24 negotiations between Dr. Vasylyev and Samsung. And
11:16 25 this is a sword and shield issue that I'd like to bring

11:16 1 to the Court's attention, which it starts up here but
11:16 2 the punch line is here, where -- you can read it: Can
11:17 3 you tell me anything about the negotiations that led to
11:17 4 the agreement?

11:17 5 Same instruction, which is an instruction
11:17 6 not to answer.

11:17 7 Yeah. Besides the fact that there was a
11:17 8 negotiation, I can't answer.

11:17 9 THE COURT: Are you going to get into the
11:17 10 negotiations?

11:17 11 MR. MCCARTY: Not about the negotiations
11:17 12 at all, sir.

11:17 13 THE COURT: Okay.

11:17 14 MR. MCCARTY: This is about his -- the
11:17 15 background of the license and the facts that led to the
11:17 16 license, not about the parties' back-and-forth
11:17 17 negotiations.

11:17 18 MR. BURESH: He's going to talk about
11:17 19 his -- what he views as his side of the negotiation.
11:17 20 This entire script is coming off the last trial where
11:17 21 he said that he gave Samsung a first mover discount.
11:17 22 And if that starts to come out, that would violate the
11:17 23 sword and shield rule because he did not answer those
11:17 24 questions during his deposition.

11:17 25 MR. MCCARTY: That's just a

11:17 1 mischaracterization of --

11:17 2 THE COURT: Is the first mover deal part
11:17 3 of the licenses? It's in the license?

11:17 4 MR. MCCARTY: It's what was in his mind.
11:18 5 It's not a negotiation.

11:18 6 THE COURT: If it's not in his license,
11:18 7 then he shouldn't talk about it.

11:18 8 MR. MCCARTY: Okay. Thank you,
11:18 9 Your Honor.

11:18 10 (Bench conference concludes.)

11:18 11 BY MR. MCCARTY:

11:18 12 Q. Picking up where we left off, sir.

11:18 13 Now, in -- after you had determined that
11:18 14 Samsung was using your technology in some of its
11:18 15 products, did you have to bring an infringement suit?

11:18 16 A. Yes. Eventually.

11:18 17 Q. Okay. Was that a difficult decision?

11:18 18 A. It was extremely difficult decision.

11:18 19 Q. Why?

11:18 20 A. Well, because before that time, I had never
11:18 21 been involved in a, like, technology dispute like that.
11:18 22 So it was completely foreign for me.

11:18 23 Q. Okay. Did that matter resolve with Samsung?

11:18 24 A. Yes. It resolved, thankfully, pretty quickly.
11:18 25 Within one year.

11:19 1 Q. Did you have to go to trial with a jury?

11:19 2 A. No. Not at all. They were willing to do
11:19 3 that, resolve that.

11:19 4 Q. Did Samsung pay to license several of your
11:19 5 patents?

11:19 6 A. Yes. They did.

11:19 7

11:19 8

11:19 9 Q. Okay. Without getting into any of the
11:19 10 economic terms or negotiations, can you tell me how it
11:19 11 felt having Samsung pay the licensure technology?

11:19 12 A. Yes. It felt very validating because that was
11:19 13 the first instance of any company, especially a company
11:19 14 of that kind of size and -- and importance, like
11:19 15 Samsung, it's a household name, to recognize the value
11:19 16 of my technology and pay for it, for using it.

11:19 17 Q. During opening statements, did you hear that
11:19 18 the damages at issue in this case are quite a bit
11:19 19 larger than

11:19 20 A. Yes, sir.

11:19 21 Q. Okay. Did you personally investigate the
11:19 22 extent to which Samsung used your technology?

11:20 23 A. Yes.

11:20 24 Q. About how many Samsung products were you able
11:20 25 to confirm had your technology in it?

11:20 1 A. We found that they used our technology in
11:20 2 seven PC monitors.

11:20 3 Q. Seven?

11:20 4 A. Seven different models. Yes.

11:20 5 Q. Of monitors?

11:20 6 A. Monitors. Yeah.

11:20 7 Q. Did you also learn about the future of
11:20 8 Samsung's LCD business?

11:20 9 A. Yes. So several months before, like, I
11:20 10 entered into license agreement, I learned that Samsung
11:20 11 was going to shutter their internal production like of
11:20 12 these LCD panels. These are -- these -- like all kinds
11:20 13 of backlights.

11:20 14 Q. Now, you mentioned one other agreement with
11:20 15 the company called MSI, correct?

11:20 16 A. Yes, sir.

11:20 17 Q. Who is that?

11:20 18 A. MSI is a computer company.

11:20 19 Q. And did you enter into a license with them?

11:20 20 A. Yes, sir.

11:20 21 Q. Did the MSI case have to go to a trial with a
11:20 22 jury?

11:21 23 A. No, sir.

11:21 24

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[REDACTED]

Q. Now, you mentioned you also suspected that ASUSTeK had used your patented technology, correct?

A. That is correct.

Q. How did you come to that understanding?

A. So I, like, noticed that some of the monitors specifically under the ASUS brand also were exhibiting some of the hallmarks that would be attributed to my technology.

Q. Like what?

A. Like they were getting thinner. They're having like thin bezel. They were getting more efficient. And also more -- provided, you know, better uniformity and had -- many of the monitors had exceptionally good color gamut.

Q. Did you perform an investigation on ASUSTeK products?

A. Yes, sir.

Q. What did your initial investigation reveal?

11:22 1 A. It revealed that ASUS was using my patented
11:22 2 technology in their PC monitors, specifically in the
11:22 3 backlights.

11:22 4 Q. Did you immediately, you know, have to file a
11:22 5 patent suit at that time?

11:22 6 A. No. I didn't want to actually initiate patent
11:22 7 suit at all initially.

11:22 8 Q. Did you contact ASUS to ensure that they were
11:23 9 on notice of your patented technology at some point in
11:23 10 time?

11:23 11 A. Yes. I felt that was important, and I asked
11:23 12 my lawyer to send them a letter to put them on notice.

11:23 13 Q. And did you authorize that -- did you
11:23 14 authorize your attorney at that time to send a letter
11:23 15 to ASUSTeK?

11:23 16 A. Correct.

11:23 17 Q. Okay. Can you please turn in your binder to
11:23 18 Tab 8, sir? Is --

11:23 19 A. Yes.

11:23 20 Q. Is that a letter dated February 19th, 2021?

11:23 21 A. That is correct.

11:23 22 Q. And is this the letter that you authorized
11:23 23 your counsel at the time to send to ASUSTeK?

11:23 24 A. Yes, sir.

11:23 25 MR. MCCARTY: Okay. Your Honor,

11:23 1 plaintiff introduces into evidence Plaintiff's
11:23 2 Exhibit 16.

11:23 3 MR. BURESH: No objection.

11:23 4 THE COURT: Admitted.

11:23 5 MR. MCCARTY: Mr. Diaz, could you put
11:23 6 that one up on the screen? Thank you.

11:23 7 BY MR. MCCARTY:

11:23 8 Q. Now, what were you hoping to achieve through
11:23 9 this letter?

11:23 10 A. Well, it just says it right there. So
11:24 11 basically to engage in discussions regarding the amount
11:24 12 of damages that would be proper to remedy ASUS's use of
11:24 13 the patents and come up with a amicable resolution, if
11:24 14 possible.

11:24 15 Q. Did you send the letter to ASUSTeK to put them
11:24 16 on notice of their patent infringement before granting
11:24 17 your license to Samsung?

11:24 18 A. Yes, sir.

11:24 19 Q. Looking at the top of the February 19th, 2021
11:24 20 letter to ASUSTeK, who did this letter get sent to?

11:24 21 A. So that letter was sent to ASUSTeK Computer,
11:24 22 Inc., which is the Taiwanese patent company. And also,
11:24 23 it was sent -- a copy of that letter was also sent to
11:24 24 their U.S.-based subsidiary, which is the ASUS Computer
11:24 25 International.

11:24 1 MR. MCCARTY: Mr. Diaz, if you scroll to
11:24 2 the cc line of this letter and highlight ASUS.

3 BY MR. MCCARTY:

11:25 4 Q. Is that the company that's the -- kind of the
11:25 5 office of ASUSTeK in the United States, ASUSTeK
11:25 6 Computer International?

11:25 7 A. The one that's just -- on the top or on the
8 bottom?

11:25 9 Q. On the bottom.

11:25 10 A. On the bottom, yes. This is their U.S.-based
11:25 11 subsidiary.

11:25 12 Q. So you sent the letter to the parent and the
11:25 13 local office?

11:25 14 A. Correct. I sent to both.

11:25 15 Q. Why both?

11:25 16 A. Because I didn't know at that time what
11:25 17 company or part of the company I'll be dealing with.
11:25 18 So I decided to send to both so that they're on notice
11:25 19 of my patent.

11:25 20 Q. And in your letter to ASUSTeK, were you
11:25 21 careful to make sure that you listed all the relevant
11:25 22 patents in this case?

11:25 23 A. Yes, sir. This is what I did.

11:25 24 MR. MCCARTY: And, Mr. Diaz, if you could
11:25 25 just highlight.

1 BY MR. MCCARTY:

11:25 2 Q. Did you list the '318 patent?

11:25 3 A. Yes, sir.

11:25 4 Q. And the '342 patent?

11:25 5 A. Yes.

11:25 6 Q. And the '089 patent?

11:25 7 A. Yep.

11:25 8 Q. And the '562 patent?

11:25 9 A. Exactly.

11:25 10 Q. And did you also identify for ASUSTeK some
11:26 11 particular example products that you believed had
11:26 12 adopted your patented technology?

11:26 13 A. Yes, sir. This is what I did here.

11:26 14 Q. Why?

11:26 15 A. Because I wanted to give them some example --
11:26 16 some examples to get them quicker up to speed and to
11:26 17 give them some actual examples where we believed that
11:26 18 our technology was being used.

11:26 19 Q. And did you keep a record of delivery of the
11:26 20 letter so that you knew if and when it actually was
11:26 21 received by ASUSTeK?

11:26 22 A. Yes, sir. I did.

11:26 23 Q. Okay. If you could turn, please, in your
11:26 24 binder to Tab 9.

11:26 25 A. Yes.

11:26 1 Q. Is this a copy of that delivery receipt for
11:26 2 the letter to ASUSTeK?

11:26 3 A. Correct. In this case, it was DHL.

11:26 4 MR. MCCARTY: Your Honor, plaintiff moves
11:26 5 into evidence PTX-15.

11:26 6 MR. BURESH: No objection.

11:26 7 THE COURT: Admitted.

11:26 8 MR. MCCARTY: Mr. Diaz, would you put
11:26 9 that one up, please?

11:26 10 BY MR. MCCARTY:

11:26 11 Q. Is this the confirmation that ASUSTeK received
11:26 12 your initial correspondence?

11:26 13 A. Yes, sir. It is.

11:27 14 Q. And what date does it confirm it was
11:27 15 delivered?

11:27 16 A. It was delivered on February 25th of 2021.

11:27 17 Q. So at this point, it was confirmed that
11:27 18 ASUSTeK received notice of your patents and your
11:27 19 allegations of infringement for licensing purposes?

11:27 20 A. Correct.

11:27 21 Q. Okay. Did ASUSTeK respond to your letter?

11:27 22 A. Yes. They did.

11:27 23 Q. Who did that response come from?

11:27 24 A. That response came from the parent company,
11:27 25 from the Taiwanese company.

11:27 1 Q. Can you turn in your binder to Tab No. 10,
11:27 2 please, sir?

11:27 3 A. Yes.

11:27 4 Q. You saw this in opening.

11:27 5 Is this the response from ASUSTeK responding
11:27 6 to your February letter about your patents and their
11:27 7 products?

11:27 8 A. Yes, sir. It looks -- it is.

11:27 9 Q. And you're familiar with this -- this
11:27 10 document?

11:27 11 A. Yes. I am.

11:27 12 MR. MCCARTY: Your Honor, plaintiff moves
11:27 13 into evidence PTX-18.

11:27 14 MR. BURESH: No objection.

11:27 15 THE COURT: Admitted.

11:27 16 MR. MCCARTY: Mr. Diaz, thank you.

11:27 17 BY MR. MCCARTY:

11:28 18 Q. All right. Is this the e-mail response that
11:28 19 you were just talking about in PTX-18 from ASUSTeK?

11:28 20 A. Yes, sir.

11:28 21 Q. Okay. And what's the date of this
11:28 22 correspondence?

11:28 23 A. It is dated March 12th of 2021.

11:28 24 Q. A little less than a month from when you
11:28 25 originally sent your letter, correct?

11:28 1 A. Yeah. Approximately.

11:28 2 Q. And Mr. Wu states that: ASUSTeK Computer,
11:28 3 Inc. ("ASUS") is aware of your letter dated
11:28 4 February 19th, 2021. We are open to engaging with
11:28 5 SVVTI and discussions regarding patent licensing
11:28 6 matters.

11:28 7 Did I read that right?

11:28 8 A. It sounds precisely right.

11:28 9 Q. Now, earlier you mentioned that you had
11:28 10 delivered the letter to both the Taiwanese parent
11:28 11 entity as well as the smaller U.S. sub, right?

11:28 12 A. Correct.

11:28 13 Q. Did Mr. Wu here work for the parent Taiwanese
11:28 14 entity or the U.S. office?

11:28 15 A. It says it right here. So he worked for the
11:29 16 parent company, the ASUSTeK, and he's from the legal
11:29 17 affairs center.

11:29 18 Q. And what was your impression of that?

11:29 19 A. That their parent company was responsible for
11:29 20 handling all of the patent infringement issues. So
11:29 21 from then on, I assumed that I would need to continue
11:29 22 communicating with them.

11:29 23 Q. Now, did you take Mr. Wu up on his offer to
11:29 24 discuss -- sorry. Let me rephrase that question.

11:29 25 Did Mr. Wu take you up on your offer to

11:29 1 discuss damages and royalty rate for a resolution?

11:29 2 A. Not at all.

11:29 3 Q. Well, did -- it says he's interested there,
11:29 4 but did he ask for something?

11:29 5 A. Yeah. So instead, he asked for some exemplary
11:29 6 claim charts.

11:29 7 Q. And what is a claim chart?

11:29 8 A. Oh, a claim chart is like a special type of
11:29 9 document, essentially like a table that compares claims
11:30 10 of the patents with the features in the product.

11:30 11 Q. What was your reaction to that?

11:30 12 A. It felt very strange, and I was disappointed
11:30 13 because I felt that, okay, ASUS is a large company.
11:30 14 They have like massive legal department. They have
11:30 15 engineering department. So they had our patents. They
11:30 16 obviously had their own products, their own monitor.
11:30 17 So they have everything. So what -- why would they
11:30 18 even ask for the claim charts from us?

11:30 19 Q. But did you nevertheless get to work on those
11:30 20 claim charts?

11:30 21 A. Yes. We still went ahead and started working
11:30 22 on fulfilling that request.

11:30 23 Q. In the meantime, did your attorney work on
11:30 24 doing an NDA or a confidentiality agreement with them?

11:30 25 A. Yes. I felt that I needed some protection,

11:30 1 and I entered into a nondisclosure agreement with ASUS.

11:30 2 Yeah, with ASUS.

11:30 3 Q. And which company, the parent or the
11:31 4 subsidiary, did you enter into a contract with?

11:31 5 A. With the parent company. The one that I
11:31 6 believed was responsible for the infringement.

11:31 7 Q. And why did you enter into an NDA?

11:31 8 A. Because I wanted to be protected. So I was
11:31 9 dealing like it was a foreign company on the matters
11:31 10 involved in like the U.S. and some confidential matters
11:31 11 like patents, and I wanted to just be protected.

11:31 12 Q. Now, once you had the NDA, was it a quick
11:31 13 process getting the claim charts together and
11:31 14 investigating all the products?

11:31 15 A. No. It was a extremely tedious and
11:31 16 labor-intensive and resource-intensive process because
11:31 17 making claim charts is not easy. It takes long time.

11:31 18 Q. Can you describe what went into that long
11:31 19 process?

11:31 20 A. Right. So for creating each claim chart, we
11:31 21 would need to acquire that product, take it apart very
11:31 22 carefully, go through all of the details, document
11:32 23 everything, then analyze in -- in very like little
11:32 24 details, including specialized tools, and then document
11:32 25 all that, do the measurements, and then compile claim

11:32 1 charts based on that information.

11:32 2 Q. And how many different products did you
11:32 3 investigate during this time?

11:32 4 A. So initially we investigated around like 40.
11:32 5 So we created like 40 claim charts, but we were -- like
11:32 6 analyzed like 60-plus products.

11:32 7 Q. Recall when we were discussing Samsung, you
11:32 8 mentioned -- I think you were able to confirm seven
11:32 9 monitors.

11:32 10 Was that your testimony?

11:32 11 A. Yes, sir.

11:32 12 Q. Okay. How many eventually have you been able
11:32 13 to confirm ASUSTeK uses in their products?

11:32 14 A. About 100 different monitors.

11:32 15 Q. And were you here in opening when Mr. Caldwell
11:32 16 mentioned how many different -- how many units have
11:32 17 been sold?

11:32 18 A. Yes, sir. I do remember.

11:32 19 Q. And how many was that?

11:33 20 A. They sold over 4 million monitors --

11:33 21 Q. Now, you --

11:33 22 A. -- with my technology in it.

11:33 23 Q. Thank you.

11:33 24 You mentioned it would take, I think, six
11:33 25 months or seven months to get all those -- all that

11:33 1 data to ASUS.

11:33 2 Did it have to take that long?

11:33 3 A. Yes. That's how, you know, labor intensive
11:33 4 and time consuming that process is. So for creating
11:33 5 like those initial 40 claim charts, which, by the way,
11:33 6 contained like thousands of pages, so we had to perform
11:33 7 all this work, all the analysis, all the teardowns and
11:33 8 documentation and make -- to make sure that everything
11:33 9 was done correctly and very precisely.

11:33 10 Q. If you'd turn in your binder to Tab 11, sir.

11:33 11 A. Yes, sir.

11:33 12 Q. Are these photos and test results that you
11:33 13 personally documented analyzing the ASUSTeK product?

11:33 14 A. I'm sorry. You said like 11 through?

11:33 15 Q. Just Tab 11.

11:33 16 A. Tab 11.

11:33 17 Yes, sir. It's just one exemplary product, I
11:34 18 think.

11:34 19 Q. And with lots of different pictures and
11:34 20 analysis?

11:34 21 A. Correct.

11:34 22 Q. And did you personally run all those tests and
11:34 23 take all those pictures?

11:34 24 A. Yes. I either did it myself or directed my
11:34 25 engineers to perform that work, but of course I

11:34 1 personally verified everything.

11:34 2 Q. And what particular product are we looking at
11:34 3 here in Tab 11?

11:34 4 A. Tab 11, we're looking at the ASUSTeK -- ASUS
11:34 5 monitor, which has identifier PA278CV.

11:34 6 MR. MCCARTY: Your Honor, plaintiff moves
11:34 7 PTX-109 into evidence.

11:34 8 MR. BURESH: No objection.

11:34 9 THE COURT: Admitted.

11:34 10 MR. MCCARTY: Mr. Diaz, can we go back to
11:34 11 the slides? Thank you.

11:34 12 BY MR. MCCARTY:

11:34 13 Q. Now, you mentioned we're going to look at
11:34 14 PA278CV, correct?

11:34 15 A. Correct.

11:34 16 Q. Why are we going to walk through that one?

11:34 17 A. Because the -- my understanding is that the
11:35 18 parties agreed that this is one of the two
11:35 19 representative products. So we won't waste time, like,
11:35 20 looking at all of the monitors that we have
11:35 21 disassembled.

11:35 22 Q. So what are we seeing here on the screen?

11:35 23 A. So here, we have like the shipping box, the
11:35 24 box in which the display is shipped. So we're just
11:35 25 checking that it has the correct identifier of the

11:35 1 model of the monitor.

11:35 2 Q. And if you look at your screen on the next
11:35 3 slide on the screen?

11:35 4 A. Yeah. We're also like checking the -- that
11:35 5 that's correct monitor, like the shipment, the correct
11:35 6 shipment and the like.

11:35 7 Q. If you look on the screen, I'm projecting that
11:35 8 for the jury so they can see it too.

11:35 9 Is this kind of the physical product once you
11:35 10 take it out of the packaging?

11:35 11 A. Yeah. So on the left, you see like the front
11:35 12 and back of the display.

11:35 13 Q. And what are we focusing in on there on the
11:35 14 right?

11:35 15 A. On the right, we're again verifying -- it's
11:36 16 like the serial number label on the back. We're
11:36 17 verifying that's indeed an ASUS product, that it is --
11:36 18 shows the correct model, which is in case PA278CV, and
11:36 19 it was manufactured in January of 2021.

11:36 20 Q. And what about here? What's on this screen?

11:36 21 A. So here, after we, like, carefully took off
11:36 22 the back cover, we're seeing that there's like a panel,
11:36 23 the so-called LCD backlighting assembly. And we are
11:36 24 also checking the labels on the panel and where you
11:36 25 find that it was, like, manufactured by one of the ASUS

11:36 1 OEMs, which is in the case interlocks. It also
11:36 2 identifies the panel by certain numbers.

11:36 3 Q. All right. So what are we looking at here?
11:37 4 What are the components?

11:37 5 A. So this is actually when we separated the
11:37 6 actual screen, the LCD screen from the other part,
11:37 7 which is a backlight, which is -- you can see on the
11:37 8 bottom.

11:37 9 Q. And in that second photo, it looks like it's
11:37 10 lit up; is that right?

11:37 11 A. Correct. So the backlight part is -- is lit
11:37 12 when you switch the monitor on.

11:37 13 Q. All right. Now, I'm going to grab a board,
11:37 14 but we can, as I do that, explain what's on the screen
11:37 15 here.

11:37 16 A. Yes. Absolutely.

11:37 17 So we are basically drilling down and opening
11:37 18 that backlight unit. And what we see inside is that
11:37 19 there are five, like, optical layers sandwiched between
11:37 20 the -- like the back color, metal color in the back,
11:37 21 and the LCD screen on the -- on the -- on the top.

11:37 22 Q. So this is actually in the back of the ASUSTeK
11:37 23 product, correct?

11:37 24 A. That is correct. That is the backlighting
11:38 25 unit.

11:38 1 Q. Okay.

11:38 2 A. Inside of it.

11:38 3 Q. And can you just kind of walk us through what
11:38 4 these various films and components are?

11:38 5 A. Absolutely.

11:38 6 So the first layer of that kind of wide sheet
11:38 7 is a reflector sheet. And then the next one is the
11:38 8 light guide where you can -- waveguide or LGP in short.
11:38 9 And also -- and above that, we have like three
11:38 10 different optical layers which are called "optical
11:38 11 diffusers."

11:38 12 Q. Thank you.

11:38 13 Now, which of these components did you kind of
11:38 14 drill down into your next out of these?

11:38 15 A. So next, we're focusing on the LGP, the light
11:38 16 guide. That's the thicker part.

11:38 17 Yes, that one.

11:38 18 Q. That's the thick guide?

11:38 19 A. Correct.

11:38 20 Q. All right. We're drilling down here.

11:38 21 What's on the blow-up board here now?

11:39 22 A. So we're looking at that light guide, this
11:39 23 very high magnification. In this case we're just
11:39 24 looking at the very corner of that light guide.

11:39 25 Q. And is this that thicker piece that we saw in

11:39 1 the stack earlier?

11:39 2 A. Yes. Exactly.

11:39 3 Q. What were you looking for on this light guide
11:39 4 plate that you can see on the top?

11:39 5 A. So on top you can see like a parallel array
11:39 6 of, like, bridges.

11:39 7 Q. And what are those?

11:39 8 A. And those are actually the linear lenses that
11:39 9 are part of my inventions.

11:39 10 Q. We talked about lenses and then also
11:39 11 microstructures.

11:39 12 Did you find the microstructures in the
11:39 13 product?

11:39 14 A. Yes, sir. So the microstructures were found
11:39 15 on the back surface of that light guide.

11:39 16 Q. Can you tell us what we're looking at here?

11:39 17 A. Yeah. We're looking here at the highly
11:40 18 magnified image of the bottom surface of the light
11:40 19 guide where you can see this, like, tiny structure
11:40 20 formed in the surface, which we call, like,
21 microstructure.

11:40 22 Q. And that red legend in the bottom, I don't
11:40 23 know if the jury can see it. It says, I think,
11:40 24 150 micron; is that right?

11:40 25 A. Yeah. So that scales -- that's scaled between

11:40 1 like those small, vertical, red kind of lines. It
11:40 2 shows you the scale.

11:40 3 Q. Can you give us a sense of how small that is?

11:40 4 A. Yeah. So it shows 150 microns. Basically
11:40 5 1 micron is 1,000 times smaller than a millimeter.

11:40 6 To give you a comparison, like the thickness
11:40 7 of the human hair is roughly about 70 microns. So
11:40 8 you're looking at like the scale of these
11:40 9 microstructures of about the size of a human hair.
11:40 10 This is how small they are.

11:40 11 Q. Did you also perform analysis of these
11:40 12 features, the lenses and the microstructures, under a
11:41 13 microscope?

11:41 14 A. Yes. This is what we're showing here.

11:41 15 Q. Can you explain, just kind of walk through
11:41 16 what we're looking at, on the slide of PTX-109?

11:41 17 A. Right. So on the left below the -- that image
11:41 18 of the -- close-up image of the light guide, you see a
11:41 19 three-dimensional highly magnified image of a small,
11:41 20 small portion of that light guide. And that image was
11:41 21 taken as special instrument, which is called
11:41 22 "three-dimensional microscope."

11:41 23 Q. And what about on the right?

11:41 24 A. On the right, you're seeing like a -- just a
11:41 25 highly magnified, you know, image on the top. And on

11:41 1 the bottom, you're seeing similar three-dimensional
11:41 2 image of an individual microstructure. You can see the
11:41 3 shape of it.

11:41 4 Q. Are you showing test measurements of those
11:41 5 lenses and those microstructures in the ASUSTeK
11:41 6 products here?

11:41 7 A. Yes, sir. So these images and analysis came
11:42 8 from analyzing the shapes of those features like lenses
11:42 9 and microstructures. So here, we're measuring their,
11:42 10 like, dimensions, their exact shapes, different angles,
11:42 11 also like examining the cross section.

11:42 12 Q. And what tool are you using to measure all of
11:42 13 these -- all this data?

11:42 14 A. We -- we are using here a 3D optical profiler.

11:42 15 Q. What is the 3D optical profile measuring?

11:42 16 A. So it's measuring like different features,
11:42 17 like particularly geometrical features of this very
11:42 18 high magnification. And also allows you to study them
11:42 19 in a cross section and study how these shapes are, you
11:42 20 know, exactly -- you know, what shapes they're
11:42 21 followed. And you can measure different parameters,
11:42 22 like the radius of that curvature or the angles at
11:42 23 which the surfaces are sloped relatively to the
11:42 24 surface.

11:43 25 Q. Last one. What are these images showing on

11:43 1 the screen at PTX-109?

11:43 2 A. So these are just showing the light source,
11:43 3 the LEDs which are used in this case, which are
11:43 4 arranged along an edge of this panel.

11:43 5 Q. So is the product at PTX-109 an edge-lit
11:43 6 monitor?

11:43 7 A. It is an edge-lit monitor.

11:43 8 Q. Thank you.

11:43 9 If you turn in your binder, just one more, to
11:43 10 Tab 12.

11:43 11 A. Yes, sir.

11:43 12 Q. Can you explain what we're looking at in the
11:43 13 document at PTX-116 in Tab 12?

11:43 14 A. Yes, sir. So this is the other one
11:43 15 representative product that the -- the parties agree
11:43 16 actually to be representative.

11:43 17 Q. And are these the test data images and so
11:43 18 forth that you personally collected with respect to
11:43 19 this product?

11:43 20 A. Yes. For that particular, the second product.

11:43 21 Q. And what is the product here? Is it the
11:44 22 PG32UQ?

11:44 23 A. Yes. It says PG32UQ. Yes.

11:44 24 MR. MCCARTY: Your Honor, plaintiff moves
11:44 25 into evidence PTX-116.

11:44 1 MR. BURESH: No objection.

11:44 2 THE COURT: Admitted.

11:44 3 BY MR. MCCARTY:

11:44 4 Q. All right. We'll walk through these a little
11:44 5 bit quicker.

11:44 6 A. Okay.

11:44 7 Q. Did you perform the same analysis that you did
11:44 8 with the first product on this product?

11:44 9 A. Yes. Pretty much the same, and that is
11:44 10 following the same procedure.

11:44 11 Q. Did you perform the same verification and
11:44 12 cataloging of information?

11:44 13 A. Exactly.

11:44 14 Q. And what are we seeing on the screen here?

11:44 15 A. So on the screen, like you see front and back
11:44 16 of a display. And then also after we took off the back
11:44 17 cover, you see the serial number kind of label where
11:44 18 you can verify the -- that -- who the panel
11:44 19 manufacturer is, the OEM, and have an identifier. And
11:44 20 it also shows you the manufacturing date.

11:45 21 Q. And did you go through the same process of
11:45 22 tearing down the monitor and analyzing it?

11:45 23 A. Exactly. So we're seeing here the screen and
11:45 24 the backlights separated. We're seeing the drill down,
11:45 25 like, of the internal layer of that backlight.

11:45 1 Q. Now, this is for PTX-116. We looked at this.
2 It looks pretty similar.

11:45 3 But is there an additional film in this one
11:45 4 that was not in the previous product?

11:45 5 A. Yes, sir.

11:45 6 Q. And which one is that?

11:45 7 A. It's that yellow -- yellow color one. Yes.
11:45 8 That's added to that product.

11:45 9 Q. And what is that film, sir?

11:45 10 A. That is a specialized film that contains
11:45 11 quantum dots, those materials that you saw the
11:45 12 demonstration of.

11:45 13 Q. And is that the film that contains those red
11:45 14 and green nanoparticles we discussed earlier?

15 A. Correct.

11:45 16 Q. Did you carefully analyze that as well?

11:45 17 A. Yes, sir.

11:45 18 Q. Okay. In the PTX-116 product, did you confirm
11:46 19 the existence of the linear lenses on the top?

11:46 20 A. Yes. Yes, sir. In the same fashion.

11:46 21 Q. And what about microstructures, did you find
11:46 22 that on the bottom?

11:46 23 A. We did find them on the bottom as well.

11:46 24 Q. And did you perform the same tasks and
11:46 25 analyses to confirm the structures?

11:46 1 A. Exactly.

11:46 2 Q. And is the product at PX-116 an edge-lit LED?

11:46 3 A. It is an edge-lit LED, except the LED color is
11:46 4 blue.

11:46 5 Q. Thank you.

11:46 6 Now, did you perform this same analysis across
11:46 7 all the products at issue, I think we said over 60
11:46 8 different products that you analyzed?

11:46 9 A. Correct. We analyzed over 60 different
11:46 10 products.

11:46 11 Q. And for all of those product investigations,
11:46 12 did you personally or, you know, with your team, do all
11:46 13 the imaging, testing, and analysis?

11:46 14 A. Exactly, yeah. We did follow pretty much the
11:46 15 same procedure for all of them.

11:47 16 Q. Did you do that in your lab?

11:47 17 A. Yes.

11:47 18 Q. Is it fair to say that this investigation
11:47 19 resulted in a lot of data and evidence and product
11:47 20 imaging?

11:47 21 A. It is fair to say.

11:47 22 Q. All right. If you stack it all up, is it
11:47 23 coming up several binders' worth in just data?

11:47 24 A. Yes. That's exactly how it looks.

11:47 25 Q. We're going to go through all that.

11:47 1 A. No. I don't want to go right now.

11:47 2 Q. Once you had your initial set of evidence
11:47 3 complete, did you instruct your lawyer to deliver it to
11:47 4 ASUSTeK as they asked?

11:47 5 A. Yes, sir. That's what I did.

11:47 6 Q. Will you please turn in your binder to Tab 14?

11:47 7 A. Yes, sir.

11:48 8 Q. Is this the e-mail correspondence at PTX-130
11:48 9 (sic) that follows up from the initial correspondence
11:48 10 with your letter and Mr. Wu from ASUSTeK?

11:48 11 A. Yes.

11:48 12 Q. And are you familiar with this correspondence,
11:48 13 sir?

11:48 14 A. Yes, sir.

11:48 15 MR. MCCARTY: Your Honor, plaintiff moves
11:48 16 PTX-30 for admission into evidence.

11:48 17 MR. BURESH: No objection.

11:48 18 THE COURT: Admitted.

11:48 19 BY MR. MCCARTY:

11:48 20 Q. Now, is this the same e-mail chain with
11:48 21 ASUSTeK and Mr. Wu in Taiwan that we looked at earlier,
11:48 22 just kind of a little later in time?

11:48 23 A. Yes. It's the same kind of, like, chain.

11:48 24 Q. Now, what is the date of this correspondence?

11:48 25 A. This one has a date of December 2nd of 2021.

11:48 1 Q. And does that correspond with about the time
11:48 2 it took to create all that data and do all that claim
11:48 3 charting?

11:48 4 A. Yeah. So basically, we, like, spend like the
11:49 5 whole summer and fall on doing these teardowns and
11:49 6 analysis and creating all these claim charts. So I
11:49 7 remember, like, finishing around Thanksgiving or
11:49 8 something like that. And that this is when we were
11:49 9 ready to provide this information.

11:49 10 Q. And at that point in time, about how many
11:49 11 charts were you able to provide?

11:49 12 A. I think at that time, we provided 40 charts,
11:49 13 if I remember correctly.

11:49 14 Q. After all that effort, what were you expecting
11:49 15 from ASUSTeK?

11:49 16 A. Well, of course I expected that it would take
11:49 17 a little bit of time for them, like, to go over all
11:49 18 these, like, claim charts because there were so many.

11:49 19 But at the same time, I expected them to
11:49 20 actually realize the extent to which they were using
11:49 21 our technology in their products, and they'll just
11:49 22 enter into a licensing agreement with us as the law
11:49 23 requires.

11:49 24 Q. Is that how they responded?

25 A. No.

11:49 1 Q. What do you mean by that?

11:49 2 A. Well, instead, ASUS came back and said that,
11:50 3 you know what? We, like, had you to go through all
11:50 4 this process. We promised that we will engage in
11:50 5 negotiations. And now they're saying, oh, like just
11:50 6 kidding. We're not appropriate company to discuss.

11:50 7 They say that the -- they're not manufacturer
11:50 8 of display panels. And they even don't know how the
11:50 9 displays are implemented. So they don't know how
11:50 10 they're made or how they work.

11:50 11 Q. Now, I see there that Mr. Wu does still say
11:50 12 that you could give him the claim charts; it was just
11:50 13 going to take a long time?

11:50 14 A. Yes, sir.

11:50 15 Q. Did you give the claim charts to him still?

11:50 16 A. We did.

11:50 17 Q. Is that what's happening at this December 4th
11:50 18 e-mail in PTX-30?

11:50 19 A. Correct. This is an e-mail from my lawyer
11:50 20 where he puts a link to the claim charts.

11:51 21 Q. Now, when they indicated that you should
11:51 22 really not talk to ASUSTeK but to some other company,
11:51 23 did you have your lawyer ask for that other company's
11:51 24 information?

11:51 25 A. Yes, sir.

11:51 1 Q. Okay. And did they provide you with that
11:51 2 information?

11:51 3 A. Not really.

11:51 4 Q. Okay. What are we seeing on the screen here?

11:51 5 A. Well -- well, they said that we don't have the
11:51 6 information regarding the panel manufacturers of the
11:51 7 monitors and the points of contacts for those panel
11:51 8 manufacturers.

11:51 9 Q. How did that make you feel?

11:51 10 A. I was shocked, honestly. It just felt almost
11:51 11 inconceivable that they don't have -- after having
11:51 12 sold, like, over 4 million of those particular monitors
11:51 13 that use my technology, but probably much more than
11:51 14 that of other types. So they didn't even know who
11:52 15 their suppliers are and their contact information.

11:52 16 Q. Did you try to contact some of those suppliers
11:52 17 eventually?

11:52 18 A. Yes. We did try to contact them on our own.

11:52 19 Q. Was it a dead end?

11:52 20 A. Yes. It pretty much resulted in a dead end.
11:52 21 They were playing the same kind of game, like claim
11:52 22 charts and so on.

11:52 23 Q. At that point, how long had you been dealing
11:52 24 with this with ASUSTeK?

11:52 25 A. I think it was like slightly over a year.

11:52 1 Q. Did you eventually decide that, you know, you
11:52 2 had to get a case on file to protect yourself?

11:52 3 A. Yeah. At that point, I realized that it was
11:52 4 not going anywhere, and I thought enough was enough.
11:52 5 And I initiated an action.

11:52 6 Q. Just a couple more questions.
11:52 7 You were here during jury selection, I guess
11:52 8 it was last Thursday, correct?

11:52 9 A. Correct.

11:52 10 Q. I think ASUSTeK's lawyer, when he was giving
11:52 11 his speech, said that they were, you know, coming to
11:52 12 clear their name and that they make the monitors.

11:53 13 Do you recall hearing that?

11:53 14 A. I do recall that.

11:53 15 Q. Is that what they were telling you when you
11:53 16 were giving them their claim charts before this
11:53 17 lawsuit?

11:53 18 A. No. They're telling complete opposite.

11:53 19 Q. How did that make you feel, hearing -- hearing
11:53 20 that discussion last Thursday?

11:53 21 A. Disappointed. I'm very disappointed.

11:53 22 Q. There's a jury in the box now, all impaneled
11:53 23 and gathered together to evaluate your patents filed
11:53 24 15 years ago with your company over 25 years ago, to
11:53 25 analyze ASUSTeK's infringement.

11:53 1 How does that make you feel?

11:53 2 A. I'm just, you know, so grateful that this
11:53 3 process is in place to protect companies like mine, and
11:53 4 it's also honor to have you all to hear my story.

11:53 5 MR. MCCARTY: I pass the witness,
11:53 6 Your Honor.

11:53 7 THE COURT: Ladies and gentleman, we're
11:53 8 going to take our lunch recess. If you all would be
11:53 9 back by about 1:20 or so, and we'll get started around
11:54 10 1:30.

11:54 11 I don't know really on Mondays what --
11:54 12 next door there's a food court, but it's closed on
11:54 13 Mondays. So I'm not sure exactly what to advise you to
11:54 14 do today for lunch. There are some places nearby. And
11:54 15 down by the highway, there's -- there are more
11:54 16 fast-food stuff. So you're sort of on your own today,
11:54 17 but tomorrow it'll be much more accessible.

11:54 18 Please remember my instructions, and
11:54 19 we'll see you at 1:30.

11:54 20 THE BAILIFF: All rise.

11:54 21 (Jury exited the courtroom.)

11:54 22 THE COURT: You may be seated.

11:54 23 Doctor, you may step down.

11:54 24 Is there anything we need to take up?

11:54 25 MR. MCCARTY: Not from the plaintiff,

11:54 1 Your Honor.

11:54 2 THE COURT: If you'd go ahead and take
11:54 3 down that board.

11:54 4 MR. MCCARTY: We'll do that right now.

11:55 5 MR. BURESH: Nothing, Your Honor.

11:55 6 (Recess taken.)

01:32 7 THE BAILIFF: All rise.

01:32 8 THE COURT: Please remain standing for
01:32 9 the jury.

01:32 10 (Jury entered the courtroom.)

01:32 11 THE COURT: Thank you. You may be
01:32 12 seated.

01:32 13 I'm blaming this -- the heat in here on
01:32 14 the jurors who complained it was too cold before lunch.
01:32 15 I told you don't say anything about it. This is what
01:32 16 happens.

01:32 17 (Laughter.)

01:32 18 THE COURT: So, Doctor, if you would
01:32 19 please take the stand.

01:33 20 CROSS-EXAMINATION

01:33 21 BY MR. BURESH:

01:33 22 Q. All right. Good afternoon, Dr. Vasylyev. How
01:33 23 are you?

01:33 24 A. Good afternoon. Very good.

01:33 25 Q. I'd like to start out maybe correcting the

01:33 1 record. Is that all right with you?

01:33 2 A. Absolutely.

01:33 3 Q. Okay. When you were testifying, you had the
01:34 4 '562 patent, some figures from that.

01:34 5 Do you recall that testimony?

01:34 6 A. Yes, sir.

01:34 7 Q. And your counsel asked you a question. He
01:34 8 said: I think we heard in opening statements from
01:34 9 ASUSTeK's lawyer.

01:34 10 That's me, right?

01:34 11 A. Right.

01:34 12 Q. Yeah. We heard a statement from ASUSTeK's
01:34 13 lawyer that the patent, the '562, does not mention
01:34 14 displays or backlights.

01:34 15 Did you hear that?

01:34 16 A. Yes, sir.

01:34 17 Q. And your response to that was: I heard that
01:34 18 very clearly.

01:34 19 A. Yes, sir.

01:34 20 Q. Okay. Now, during my opening statement, do
01:34 21 you recall that I went two patents by two patents?

01:34 22 Do you recall that?

01:34 23 A. Can you rephrase this question?

01:34 24 Q. Sure.

01:34 25 I went through two light-trapping patents.

01:34 1 Do you remember that?

01:34 2 A. You call them light-trapping patents? I'm not
01:34 3 sure that I agree with your characterization of those
01:35 4 patents.

01:35 5 Q. I'm not asking you whether you agree or not.

01:35 6 Do you recall me describing to the jury two
01:35 7 light-trapping patents?

01:35 8 A. Yes. I do.

01:35 9 Q. And I said that those two patents don't have
01:35 10 anything to do with displays.

01:35 11 Do you remember me saying that?

01:35 12 A. Yes, sir.

01:35 13 Q. And then I got to the other two patents, which
01:35 14 would include the '562, and I actually gave you credit.
01:35 15 I said: These two patents actually do talk about
01:35 16 displays and illumination systems.

01:35 17 Do you remember that?

01:35 18 A. I think you said like illumination systems,
01:35 19 but I'm not sure that you mentioned displays in your
01:35 20 statement.

01:35 21 Q. So you're not sure?

01:35 22 A. I'm not sure. I don't remember that part
01:35 23 exactly.

01:35 24 Q. So you are not sure you clearly heard me say
01:35 25 something that I didn't say. You're not sure you heard

01:35 1 that, right?

01:35 2 A. Now you're asking me about like a different
01:35 3 phrase that is said.

01:35 4 Q. Not really.

01:35 5 Let's talk about the '318 patent because you
01:36 6 were very quick to show the jury the word "display" and
01:36 7 "backlight" in the '562, which we all agree are there.

01:36 8 You didn't show the jury anything as to the
01:36 9 '318 or the '089, did you?

01:36 10 A. No. I didn't.

01:36 11 Q. And you agree with me that the '318 patent
01:36 12 does not mention displays?

01:36 13 A. It probably does not.

01:36 14 Q. Do you know your patents?

01:36 15 A. Yes, sir.

01:36 16 Q. Does the '318 patent mention displays?

01:36 17 A. I think it may not.

01:36 18 Q. Yes or no? Do you know?

01:36 19 A. I don't know.

01:36 20 Q. Let's talk about the '089, the other thing
01:36 21 that I called a light-trapping patent.

01:36 22 It doesn't mention displays, does it?

01:36 23 A. I'll just take your word.

01:36 24 Q. I'm not asking -- these are your patents, sir.

01:36 25 The '089 patent doesn't mention displays, does

01:37 1 it?

01:37 2 A. I don't know. I would need to read through
01:37 3 the entire specification. It's a very lengthy
01:37 4 specification.

01:37 5 Q. So sitting here today, the patent that you're
01:37 6 suing on, sir, you don't know whether it talks about
01:37 7 displays or not?

01:37 8 A. That -- which particular patent are you
01:37 9 referring to?

01:37 10 Q. This is the '089 patent.

01:37 11 A. Okay.

01:37 12 Q. And you're telling me that sitting here today,
01:37 13 you do not know whether your own patent talks about
01:37 14 displays or not?

01:37 15 A. Yes, sir. That particular patent, yeah. I
01:37 16 don't know if it is talking about the displays or not.

01:37 17 Q. Well, let's see.

01:37 18 MR. BURESH: Mr. Pubentz, let's do this
01:37 19 in order. Let's pull up the '318 patent. Do you have
01:37 20 that in searchable form?

21 BY MR. BURESH:

01:38 22 Q. Do you recognize the patent on the screen in
01:38 23 front of you?

01:38 24 A. Yes, sir.

01:38 25 Q. It's the '318 patent?

01:38 1 A. Yes. It is.

01:38 2 MR. BURESH: Okay. Now, just to see that

01:38 3 this works, could you do a search for the word

01:38 4 "trapping"?

01:38 5 BY MR. BURESH:

01:38 6 Q. Okay. So we're seeing results, correct?

01:38 7 A. Correct.

01:38 8 Q. All right.

01:38 9 MR. BURESH: Now, Mr. Pubentz, could you

01:38 10 do a search for the word "display"?

11 BY MR. BURESH:

01:38 12 Q. And we're showing zero results; is that

01:38 13 correct?

01:38 14 A. That's correct.

01:38 15 MR. BURESH: Eric, could you do a search

01:38 16 for the word "monitor"?

17 BY MR. BURESH:

01:38 18 Q. And we're showing zero results, correct?

01:38 19 A. That is correct.

01:38 20 MR. BURESH: Could you take me back to

01:39 21 the cover of the '318? Now -- the '318, please.

01:39 22 BY MR. BURESH:

01:39 23 Q. And, Dr. Vasylyev, you wrote these patents

01:39 24 yourself, correct?

01:39 25 A. That is correct.

01:39 1 Q. And that was in the spring of 2009 time frame?

01:39 2 A. Not the -- this particular one. Yeah. I
01:39 3 think it was filed like several months later.

01:39 4 Q. Okay. I'm just going off your testimony this
01:39 5 morning. You said you were writing these patents in
01:39 6 spring of 2009.

01:39 7 A. Right. The provisional application. Right.

8 Q. Okay.

01:39 9 A. But you're talking about, like, the full
01:39 10 utility application, which is a different one.

01:39 11 Q. But you wrote these yourself?

01:39 12 A. Yes. That's correct.

01:39 13 Q. You chose the words that would go in them?

01:39 14 A. Yes, sir.

01:39 15 Q. You agree with me that you chose to title this
01:40 16 patent the Light-Trapping Optical Cover?

01:40 17 A. Yes, sir.

01:40 18 Q. Okay. And in the abstract on the front page,
01:40 19 you again talk about a light-trapping optical
01:40 20 structure, correct?

01:40 21 A. That is correct.

01:40 22 Q. Other concepts we'll find in this patent are
01:40 23 light harvesting, correct?

01:40 24 A. That is correct.

01:40 25 Q. And light harvesting is when you take light

01:40 1 and turn it into heat or electricity, correct?

01:40 2 A. To whatever usable form of energy.

01:40 3 Q. But it's not light anymore?

01:40 4 A. It can be light because light is still a
01:40 5 usable form of energy.

01:40 6 Q. You also talk about light absorption in this
01:40 7 patent, correct?

01:40 8 A. That is correct.

01:40 9 Q. Okay.

01:40 10 MR. BURESH: Could we go to the field of
01:40 11 the invention in the '318 patent?

12 BY MR. BURESH:

01:41 13 Q. And if you're following along, this is going
01:41 14 to be Column 1, Dr. Vasylyev.

01:41 15 Now, you see here in the first sentence: The
01:41 16 present invention relates to a device and method for
01:41 17 enhancing the light trapping in light-harvesting
01:41 18 devices.

01:41 19 A. Yes, sir.

01:41 20 Q. Is that a fair characterization of the field
01:41 21 of the invention that you were working in?

01:41 22 A. Yes. That was one of the applications.

01:41 23 MR. BURESH: If we go to the summary of
01:42 24 the invention in Column 2.

01:42 25 BY MR. BURESH:

01:42 1 Q. The present invention solves a number of
01:42 2 light-harvesting problems within a compact system
01:42 3 utilizing efficient light deflection and trapping
01:42 4 mechanisms.

01:42 5 A. That is precise.

01:42 6 Q. I'm sorry?

01:42 7 A. Yes. That is precise.

01:42 8 Q. That's a summary of the invention?

01:42 9 A. It's a part of the summary of the invention.
01:42 10 Yes.

01:42 11 MR. BURESH: Let's go to the '089 patent.

01:42 12 BY MR. BURESH:

01:42 13 Q. Now, Dr. Vasylyev, again, we see a system that
01:42 14 is employing planar light-trapping and light-absorbing
01:42 15 structures in the '089, correct?

01:42 16 A. Yes, sir.

01:42 17 Q. And if we walk through the abstract, the other
01:43 18 components of this patent, we're going to see a lot
01:43 19 about light trapping and light harvesting. Is that
01:43 20 fair to say?

01:43 21 A. Yes, sir.

01:43 22 Q. The field of invention in the '089 gets even a
01:43 23 little more specific. The present invention relates to
01:43 24 a device and method for harvesting radiant energy
01:43 25 emanated by a distant radiant energy source,

01:43 1 particularly to collecting the sunlight and absorbing
01:43 2 it.

01:43 3 A. Yes, sir.

01:43 4 Q. That's a fair description of the field of
01:43 5 invention that you were working in with respect to the
01:43 6 '089 patent, correct?

01:43 7 A. Yes, sir, part of it.

01:43 8 Q. Would you agree with me that a display is not
01:44 9 a light-harvesting system?

01:44 10 THE COURT: I'm sorry. I couldn't hear
01:44 11 you. If you could, just repeat the question.

01:44 12 BY MR. BURESH:

01:44 13 Q. Would you agree with me that a display like my
01:44 14 clients sell is not a light-harvesting system?

01:44 15 A. I'm not sure about that because it includes
01:44 16 light-harvesting components in some cases.

01:44 17 Q. Do my client's displays harvest light?

01:44 18 A. Yes. Inside in some of the displays, they do
01:44 19 harvest light from the LEDs and convert it into another
01:44 20 form of light.

01:44 21 Q. So you would like this jury to believe that my
01:44 22 client's displays that are emitting light so they can
01:44 23 see it are harvesting that light. Is that what you
01:44 24 want the jury to believe?

01:44 25 A. No, sir. You mischaracterized what I said.

01:44 1 Q. Now, we had a light show during counsel's
01:45 2 opening statement, your counsel's opening statement,
01:45 3 correct?

01:45 4 A. Okay.

01:45 5 Q. With the quantum dots?

01:45 6 A. Yes. We saw the quantum dot demonstration.

01:45 7 Q. Okay. Now, you didn't invent quantum dots,
01:45 8 did you?

01:45 9 A. No, sir.

01:45 10 Q. In fact, quantum dots were around well before
01:45 11 2009?

01:45 12 A. Yes, sir.

01:45 13 Q. And the quantum dots you described were for
01:45 14 changing the colors of light, right?

01:45 15 A. Yes, sir.

01:45 16 Q. Now, I want to go through this briefly.
01:45 17 Starting with the '562 patent this time.

01:45 18 The '562 patent does not mention quantum dots,
01:46 19 does it?

01:46 20 A. It probably doesn't.

01:46 21 Q. Again, do you know or not? Do I need to do a
01:46 22 search?

01:46 23 A. If you can.

01:46 24 MR. BURESH: Would you pull up the '562
01:46 25 patent, please, and search for "quantum."

1 BY MR. BURESH:

01:46 2 Q. Zero hits. You agree with that now?

01:46 3 A. Yes, sir.

01:46 4 Q. The '562 patent does not discuss quantum dots.

01:46 5 A. Correct.

01:46 6 Q. Now let's go to the '342 patent. Do you know
01:46 7 whether it mentions quantum dots?

01:46 8 A. I don't remember that.

01:46 9 Q. Okay. So the emphasis of the show that your
01:47 10 counsel put on with the jury is talking about quantum
01:47 11 dots and shining lights through it, and you can't tell
01:47 12 this jury with just a simple yes/no whether the '342
01:47 13 talks about quantum dots?

01:47 14 A. Yeah, because we're talking about four
01:47 15 patents, and some of those patents actually do mention
01:47 16 quantum dots.

01:47 17 Q. Is it hard to keep track of four patents?

01:47 18 A. I mean, what do you mean "keep track"? I do
01:47 19 keep track of them.

01:47 20 Q. But you don't know which one talks about
01:47 21 quantum dots?

01:47 22 A. Yeah, because these patents contain very
01:47 23 lengthy specifications.

01:47 24 Q. Be hard to get through them, right?

01:47 25 A. No. If you know what to look for.

01:47 1 Q. Okay. Well, let's go ahead and look in the
01:47 2 '342 patent.

01:47 3 MR. BURESH: We're going to run a search
01:48 4 for "quantum." Thank you.

01:48 5 BY MR. BURESH:

01:48 6 Q. No hits.

01:48 7 Will you agree with me now that there's no
01:48 8 mention of quantum dots in the '342 patent?

01:48 9 A. Looks like it.

01:48 10 MR. BURESH: Let's go on to the '318
11 patent.

12 BY MR. BURESH:

01:48 13 Q. Dr. Vasylyev, does it mention quantum dots?

01:48 14 A. Same answer.

01:48 15 Q. Which one?

01:48 16 A. I don't remember.

01:48 17 Q. Okay. Let's go ahead and do the search.

01:48 18 MR. BURESH: If we could search in the
01:48 19 '318 for the word "quantum."

01:48 20 BY MR. BURESH:

01:48 21 Q. Zero hits.

01:48 22 Do you agree with me that the quantum dots is
01:48 23 not mentioned in the '318 patent?

01:48 24 A. Looks like it.

01:48 25 Q. Okay. Last but not least, the memory test

01:48 1 apparently is over, the '089 does have the word
01:49 2 "quantum dots" in it. Okay?

01:49 3 A. Okay.

01:49 4 Q. Now, the quantum dots in the '089 patent --
01:49 5 MR. BURESH: Probably get there more
01:49 6 quickly if you do the search.

7 BY MR. BURESH:

01:49 8 Q. And just to remind the jury while we're
01:49 9 waiting for that, the '089 is one of the light-trapping
01:49 10 patents, correct?

01:49 11 A. It's how you refer to them.

01:49 12 Q. You used the word "light trapping" in the
01:49 13 title.

01:49 14 A. Correct.

01:49 15 Q. Okay.

01:49 16 A. But I would not refer to those patents as
01:49 17 light-trapping patents.

01:49 18 Q. All right. In the '089 patent on the screen
01:50 19 in front of us --

01:50 20 MR. BURESH: Could you scroll up and --
01:50 21 scroll up and show us the column number, please?

01:50 22 BY MR. BURESH:

01:50 23 Q. This is Column 11. Okay. Now, in Column 11
01:50 24 in about Line 31, we begin a new paragraph, fair?

01:50 25 A. Yeah.

01:50 1 Q. Okay. Photovoltaic layer 4 can incorporate Si
01:50 2 or other semiconductor photovoltaic materials.

01:50 3 Do you see that?

01:50 4 A. Yes, sir.

01:50 5 Q. And that can include quantum dots?

01:50 6 A. Yes, sir.

01:50 7 Q. And in the context of this description, what
01:51 8 the photovoltaic layer is doing is converting light
01:51 9 into electricity, correct?

01:51 10 A. Yes. If it is a photovoltaic material, then
01:51 11 yes.

01:51 12 Q. There are different kinds of quantum dots, are
01:51 13 there not, Dr. Vasylyev?

01:51 14 A. Yes, sir.

01:51 15 Q. There are some quantum dots that convert light
01:51 16 to electricity, correct?

01:51 17 A. Depends on how you design them. Yes.

01:51 18 Q. And there are other types of quantum dots that
01:51 19 change the color of light, correct?

01:51 20 A. Yes. It depends how you design them. Yes,
01:51 21 and use.

01:51 22 Q. They're different types?

01:51 23 A. Well, I'm not sure I agree with your
01:51 24 characterization regarding different types. These are
01:51 25 quantum dots. You can call them different types, if

01:51 1 you want.

01:51 2 Q. One set of quantum dots can be used to convert
01:51 3 light to electricity, correct?

01:51 4 A. Correct.

01:51 5 Q. And another set of quantum dots can be used to
01:52 6 change the color of light?

01:52 7 A. Right. But it doesn't mean that you can use
01:52 8 them interchangeably.

01:52 9 Q. I agree. You can't use them interchangeably,
01:52 10 correct?

01:52 11 A. In some cases probably, yes.

01:52 12 Q. Now, the quantum dots you're describing in the
01:52 13 '089 patent are the ones that convert light to
01:52 14 electricity, aren't they?

01:52 15 A. They're described -- they're just quantum
01:52 16 dots. They're described in an application that --
01:52 17 exemplar application of the invention in the context of
01:52 18 photovoltaic layer.

01:52 19 Q. That's all I'm asking.

01:52 20 A. Yes, sir.

01:52 21 Q. The example you've described is using quantum
01:52 22 dots to convert light to electricity, correct?

01:52 23 A. Correct. In that example.

01:52 24 Q. And the example that your lawyers and you have
01:52 25 talked about is quantum dots that are used to change

01:52 1 the color of light?

01:52 2 A. Yes, sir.

01:52 3 Q. And those are not interchangeable, are they?

01:53 4 A. I'm not sure about that.

01:53 5 Q. Does the '089 patent that discusses the
01:53 6 quantum dots in the context of light to electricity,
01:53 7 does it say anything about changing the color of light?

01:53 8 A. I don't recall that.

01:53 9 Q. You don't recall whether your patent talks
01:53 10 about changing the color of light or not?

01:53 11 A. I don't.

01:53 12 MR. BURESH: Pull back up the '089
01:53 13 patent.

01:53 14 BY MR. BURESH:

01:53 15 Q. This time --

01:53 16 MR. BURESH: Sorry. That went by kind of
01:53 17 fast there, Eric.

01:53 18 BY MR. BURESH:

01:53 19 Q. We're going to run a search for the word
01:53 20 "color" in the '089 patent. All right?

01:54 21 A. Yes, sir.

01:54 22 Q. Zero hits.

01:54 23 A. Correct.

01:54 24 Q. Okay. So the only patent where you actually
01:54 25 mention quantum dots, you don't talk about color

01:54 1 changing?

01:54 2 A. I'm not sure about that. I can explain.

01:54 3 Q. The other three patents, Dr. Vasylyev, you
01:54 4 don't mention changing the color of light either, do
01:54 5 you?

01:54 6 A. I'm not sure about that.

01:54 7 Q. You think the word "color" is going to appear
01:54 8 in one of the other three patents?

01:54 9 A. There are different ways to refer to change in
01:54 10 color other than just color -- color change. You can
01:54 11 refer to like change in the wavelengths, as I
01:54 12 explained, for example, in my testimony.

01:54 13 Q. Couldn't it be possible that you weren't
01:54 14 talking about changing the color of light in your
01:55 15 patents because back in 2009 before you started cooking
01:55 16 up this lawsuit, you weren't even thinking about
01:55 17 changing the color of light because what you were
01:55 18 working on was solar cells. Isn't that possible?

01:55 19 A. I disagree with your characterization.

01:55 20 MR. BURESH: All right. Could we pull up
01:55 21 PTX-19, please? I'm sorry. 16. I read my number
01:55 22 upside down.

01:55 23 BY MR. BURESH:

01:55 24 Q. Now, this is the letter you spent some time
01:56 25 talking about this morning, correct?

01:56 1 A. Yes, sir.

01:56 2 Q. And I believe the four patents you've asserted
01:56 3 are listed in this group, right?

01:56 4 A. That is correct.

01:56 5 Q. But there's a whole lot of other patents
01:56 6 listed in that group too, aren't there?

01:56 7 A. Yes, sir.

01:56 8 Q. Correct me if I'm wrong, but 14 total?

01:56 9 A. I didn't count right now. But yeah. It might
01:56 10 be around that number.

01:56 11 Q. Okay. So you send a letter to ASUS saying,
01:56 12 I've got 14 patents and you've got some monitors; pay
01:56 13 me some money?

01:56 14 A. I disagree with your characterization.

01:56 15 Q. Okay. 14 patents to ASUS in Taiwan and you
01:56 16 expect them to just kind of play Go Fish with your
01:57 17 portfolio of patents here and figure out what you're
01:57 18 talking about?

01:57 19 A. I disagree with your characterization.

01:57 20 Q. Now, Dr. Vasylyev, on the stand in a case that
01:57 21 we've been working on, you know, against each other for
01:57 22 like two years now, you can't give me the content of
01:57 23 the basic things you're talking about in court and
01:57 24 whether or not they're in your own patents, but you
01:57 25 expect ASUS to go through and figure out 14 patents.

01:57 1 Is that what we're hearing?

01:57 2 A. Can you rephrase your question? It was kind
01:57 3 of like so long statement. What is the actual
01:57 4 question?

01:57 5 Q. My actual question is this: Do you think it's
01:57 6 reasonable, when you can't even remember the contents
01:57 7 of your own patent, to expect ASUS to dig through these
01:57 8 lengthy specifications to figure them out?

01:57 9 A. I disagree with your characterization.

01:57 10 Q. Do you think it's unreasonable for a company
01:58 11 that receives a letter like this with no details at all
01:58 12 to say, could you give me some claim charts to let me
01:58 13 know what's going on?

01:58 14 A. I disagree with you. I think it -- letters
01:58 15 provide -- this letter provides more than enough
01:58 16 details.

01:58 17 Q. Okay. If you were a company that made
01:58 18 computer monitors and you received a whole bunch of
01:58 19 patents, many of which don't even mention monitors,
01:58 20 don't even mention displays, but instead are focused on
01:58 21 solar light trapping, do you think it might be
01:58 22 reasonable for them to say, help us understand what's
01:58 23 going on, Dr. Vasylyev? You're making the accusation.

01:58 24 Is that reasonable for them to ask?

01:58 25 A. I disagree with your characterization.

01:58 1 Q. So you don't think it's reasonable for a
01:58 2 company to just ask for a little help to understand?

01:58 3 A. It might be reasonable in certain context, but
01:58 4 in this particular case, I thought it was more than
01:59 5 enough information.

01:59 6 Q. This letter right here, is that what you're
01:59 7 talking about?

01:59 8 A. Yes, sir.

01:59 9 MR. BURESH: Okay. Let's pull up PTX-44.

01:59 10 BY MR. BURESH:

01:59 11 Q. These are the e-mails you looked at with your
01:59 12 counsel this morning, correct?

01:59 13 A. Yes, sir.

01:59 14 Q. Now, these are all in one chain. So we can
01:59 15 actually see them in an organized fashion.

01:59 16 MR. BURESH: And I'd like to go back to
01:59 17 the start, please. So we're going to work in reverse
01:59 18 order. So I'm looking for the March 12th e-mail.

02:00 19 Thank you.

02:00 20 BY MR. BURESH:

02:00 21 Q. So your letter was on February 19th -- I'm
02:00 22 sorry. It's not your letter. It was Mr. Katz, your
02:00 23 lawyer's, letter, correct?

02:00 24 A. He acted on my behalf.

02:00 25 Q. Okay.

02:00 1 A. Yes.

02:00 2 Q. It's February 19th. By March 12th you're
02:00 3 getting a response back from ASUS, correct?

02:00 4 A. Yes, sir.

02:00 5 Q. Identifying themselves, saying they're open to
02:00 6 talk about things and asking for more information?

02:00 7 A. Yes, sir. It specifically asks for exemplary
02:00 8 claim charts.

02:00 9 MR. BURESH: Okay. And then if we can go
02:00 10 up to the next piece.

02:00 11 No. Down one. Okay. Okay. Down to the
02:01 12 March 16th one, please. Thank you.

02:01 13 There we go.

14 BY MR. BURESH:

02:01 15 Q. All right. Then on March 16th, this is your
02:01 16 lawyer writing back to Mr. Wu from ASUS saying: Thank
02:01 17 you. He's pleased that ASUS is open to discussions.

02:01 18 And then he proposes a nondisclosure agreement
02:01 19 to ASUS, correct?

02:01 20 A. This is correct.

02:01 21 Q. Okay. Couple of days later, Mr. Wu responds:
02:01 22 We've received the NDA. And we'll get back to you as
02:02 23 soon as possible.

02:02 24 Do you see that?

02:02 25 A. Yes, sir. I do.

02:02 1 Q. And your lawyer responds: Thank you.

02:02 2 A. Yes.

02:02 3 Q. Three days later -- sorry. Four days later,
02:02 4 Jason responds with a revised draft NDA, correct?

02:02 5 A. Yes, sir.

02:02 6 Q. And five days after that, your lawyer
02:02 7 responds, agreeing with the NDA, correct?

02:02 8 A. Yes, sir.

02:02 9 Q. And the next e-mail up, there's a
02:02 10 countersigned NDA from ASUS to your lawyer?

02:02 11 A. Which one are you referring to? Which date?

02:02 12 Q. I'm sorry?

02:02 13 A. Which particular e-mail are you referring to?

02:02 14 Q. Yes. The April 6th e-mail. Hi, Bob.
02:02 15 Attached please find the countersigned --

02:02 16 A. The counter -- yeah. I can see that. Yes.

02:03 17 Q. Okay. Now, at this point, ASUS has asked for
02:03 18 a little help in receiving claim charts from you guys.
02:03 19 NDAs go back and forth.

02:03 20 And we come to April 6th now. There's a giant
02:03 21 gap between that and the next communication, isn't
02:03 22 there?

02:03 23 A. I'm not sure I understand your question.

02:03 24 Q. Okay.

02:03 25 A. Which communications are you referring to?

02:03 1 Q. Mr. Wu on April 6th sends back the draft, the
02:03 2 countersigned NDA, correct?

02:03 3 A. Yes. Correct.

02:03 4 Q. Now, your lawyer doesn't respond back until
02:03 5 December 2nd?

02:03 6 A. Yes.

02:03 7 Q. That's April to May to June to July, August,
02:03 8 September, October, November, December. So there's an
02:04 9 eight-month gap where your lawyer's not saying
02:04 10 anything, even though ASUS has done everything that
02:04 11 your lawyer's asked, right?

02:04 12 A. Pardon me. Can you rephrase your question?

02:04 13 Q. There is an eight-month --

02:04 14 A. I hear that. Yeah. There was a gap, right,
02:04 15 between these letters. Yes.

02:04 16 Q. And the gap was waiting for your lawyer to
02:04 17 respond again, not ASUS delaying. Your lawyer.

02:04 18 A. I'm not sure that I agree with your
02:04 19 characterization. We were preparing the claim charts,
02:04 20 as I explained in my testimony.

02:04 21 Q. And we'll get to those.

02:04 22 But we're talking eight months between when we
02:04 23 signed your NDA and when you come back to us, right?

02:04 24 A. Yes. Correct.

02:04 25 Q. Now, on the same day, Jason responds. It's on

02:04 1 the screen in front of you. And they say: As you've
02:05 2 pointed out, ASUSTeK doesn't manufacture the panels.
02:05 3 We don't have all the information on them.

02:05 4 At this point you haven't sent any claim
02:05 5 charts, have you?

02:05 6 A. No, sir.

02:05 7 Q. Okay. If we go to next paragraph, we see:
02:05 8 Having said that, I am still the ASUS person to handle
02:05 9 this case. Please provide us again with the exemplary
02:05 10 claim charts for each of the patents at issue as we
02:05 11 requested at the very beginning.

02:05 12 That's what he said, right?

02:05 13 A. Yes.

02:05 14 Q. Still waiting?

02:05 15 A. Correct.

02:06 16 MR. BURESH: Okay. Let's go up to the
02:06 17 next one. December 4th.

18 BY MR. BURESH:

02:06 19 Q. Your lawyer, Mr. Katz, comes back a couple
02:06 20 days later: I appreciate your follow-up.

02:06 21 Sounds pretty collegial, doesn't it?

02:06 22 A. Sounds like what? I'm not sure I understand.

02:06 23 Q. Collegial. These guys, they're just talking.

02:06 24 A. Okay. Yes.

02:06 25 Q. Yeah. I would like to continue to discuss

02:06 1 with you. But we're looking now at your lawyer's
02:06 2 comments.

02:06 3 If you can provide me with the points of
02:06 4 contact for your panel manufacturers, I would also be
02:06 5 happy to contact them directly, which may help to
02:06 6 reduce your role as a go-between, as you mention, and
02:06 7 may expedite the process. Right?

02:06 8 A. Yes. This is what Mr. Katz says. Yes.

02:06 9 Q. On your behalf?

02:06 10 A. Correct.

02:06 11 Q. So it's not unreasonable for ASUS to be
02:07 12 providing that contact information that your lawyer is
02:07 13 asking for.

02:07 14 That's not unreasonable, is it?

02:07 15 A. Can you rephrase the question? I'm not sure I
02:07 16 understand it.

02:07 17 Q. It wouldn't be unreasonable for ASUS to
02:07 18 provide the contact information for its vendors that
02:07 19 your lawyer is asking them to provide.

02:07 20 That's not unreasonable, is it?

02:07 21 A. Can you phrase it like in simple terms? My
02:07 22 apologies. It's just I'm trying to, like, comprehend
02:07 23 the phrase.

02:07 24 Q. Okay. Your lawyer asked for the contact
02:07 25 information for vendors?

02:07 1 A. Correct.

02:07 2 Q. It's not unreasonable for ASUS to respond by
02:07 3 giving him that contact information?

02:07 4 A. They could respond with the contact
02:07 5 information. That's my understanding.

02:07 6 Q. Okay. And if we go up to the next e-mail,
02:08 7 which is a February 18th e-mail.

02:08 8 We've seen this one before too. This is
02:08 9 Mr. Wu from ASUS coming back to your attorney with
02:08 10 identification of the vendors and contact information
02:08 11 for at least one of them, correct?

02:08 12 A. Say it again.

02:08 13 MR. BURESH: Okay. Could we highlight
02:08 14 the sentence beginning "More specifically"?

02:08 15 BY MR. BURESH:

02:08 16 Q. More specifically, you may find out
02:08 17 AU Optronics and Innolux are the panel manufacturers
02:08 18 for some of the identified monitors.

02:09 19 Do you see that?

02:09 20 A. Yes.

02:09 21 Q. So you now know the panel manufacturers at
02:09 22 this point?

02:09 23 A. A couple of names of those manufacturers.
02:09 24 Yes.

02:09 25 Q. And Mr. Wu provided the e-mail address of the

02:09 1 contact person for AU Optronics; isn't that correct?

02:09 2 A. That is correct.

02:09 3 Q. He said: I'll let you know when we get the
02:09 4 contact information for Innolux. Correct?

02:09 5 A. Can you say again? I'm sorry.

02:09 6 Q. He concluded: I will let you know if we get
02:09 7 the contact information for Innolux.

02:09 8 A. Yes.

02:09 9 MR. BURESH: Can we go up to the next
02:09 10 e-mail?

02:09 11 BY MR. BURESH:

02:09 12 Q. Now, this is Mr. Katz responding to Mr. Wu on
02:09 13 February 19th of 2022, correct?

02:09 14 A. Yes, sir.

02:09 15 Q. And he says: I appreciate your response.
02:09 16 Still a cordial discussion.

02:09 17 A. Yes, sir.

02:10 18 Q. Mr. Katz asks: Is it okay with you if I tell
02:10 19 Linh Ha that I received his contact information from
02:10 20 you?

02:10 21 That's what it says, right?

02:10 22 A. Yes.

02:10 23 Q. And if we go up one more e-mail, Mr. Wu
02:10 24 responds: It is okay to let Linh Ha know that you
02:10 25 received the contact information from me.

02:10 1 A. What's your question?

02:10 2 Q. Isn't that what it says?

02:10 3 A. Yes. It does.

02:10 4 Q. Okay. This is February 21st, 2022?

02:10 5 A. Yes, sir.

02:10 6 MR. BURESH: Okay. Now let's go forward
02:10 7 one more e-mail, and I promise to all y'all, this is
02:10 8 the last one.

02:10 9 BY MR. BURESH:

02:10 10 Q. February 21st Mr. Katz responds: Thank you,
02:11 11 Jason. I will reach out to Linh Ha. Do you have any
02:11 12 contact for Innolux?

02:11 13 Do you see that?

02:11 14 A. Yes. I do.

02:11 15 Q. Now, one month from that date, you filed a
02:11 16 lawsuit against ASUS, correct?

02:11 17 A. Right.

02:11 18 Q. Without any further communication?

02:11 19 A. I'm not sure about that, but at least in this
02:11 20 e-mail chain, I don't see any communication in between.

02:11 21 Q. And just so the record's straight, I said one
02:11 22 month, but I don't want there to be any imprecision.
02:11 23 You filed the lawsuit on March 24th of 2022. So it's
02:11 24 one month and three days later?

02:11 25 A. Yes, sir.

02:11 1 Q. You said at one point during your direct that
02:12 2 the color in ASUS' display was exceptional.

02:12 3 Do you recall that?

02:12 4 A. Yes, sir.

02:12 5 Q. Do you know how they get my client -- how do
02:12 6 they get exceptional color in their displays?

02:12 7 A. In some of them, yes. I do.

02:12 8 Q. All right. Do you know that 99.5 percent of
02:12 9 the products at issue in this case don't have quantum
02:12 10 dots in it?

02:12 11 A. I don't know that number.

02:12 12 Q. Okay.

02:12 13 A. And that ratio.

02:12 14 Q. Well, assuming that it is a huge ratio that
02:12 15 does not have quantum dots in it, how do you think that
02:12 16 my client's displays get exceptional color?

02:12 17 A. Because we disassembled several sample
02:13 18 products and we did find these features, and the
02:13 19 manufacturer, ASUS, advertises those monitors as such.

02:13 20 Q. In the 99.5 percent of products that do not
02:13 21 use any quantum dots at all, you think ASUS' products
02:13 22 still get exceptional color?

02:13 23 A. I don't think so.

02:13 24 Q. Oh, those are worse?

02:13 25 A. I think so. Compared to the ones that use

02:13 1 quantum dots, yes, they're much, much worse.

02:13 2 Q. Would it surprise you to hear that ASUS in the
02:13 3 very few products that use quantum dots has
02:13 4 discontinued that product line?

02:13 5 A. I don't know about that.

02:13 6 Q. Okay. Would it surprise you to know that ASUS
02:13 7 has never ever used a quantum dot to convert light to
02:13 8 electricity like you talk about in your '089 patent?

02:13 9 Would that surprise you?

02:13 10 A. I don't know whether or not it will surprise
02:14 11 me.

02:11 12 MR. BURESH: Could we pull up from the
02:14 13 plaintiff's demonstratives 2.47?

02:14 14 BY MR. BURESH:

02:14 15 Q. This is the ASUS PA278CV, correct?

02:14 16 A. Yes. This is what it says.

02:14 17 Q. And this is one of the products that does not
02:14 18 have any quantum dots, right?

02:14 19 A. Yes, sir.

02:14 20 Q. Okay. Now, when you crack that thing open,
02:14 21 there's really two panels in that -- in that display,
02:14 22 right?

02:14 23 A. Like two components. Yes.

02:14 24 Q. One is the liquid crystal component, right?

02:15 25 A. Yes, sir. That's correct.

02:15 1 Q. And we see that in black leaning up against
02:15 2 the wall?

02:15 3 A. Exactly.

02:15 4 Q. And then you have a backlight component,
02:15 5 right?

02:15 6 A. Yes, sir.

02:15 7 Q. And that would be the -- the white part that's
02:15 8 laying down on the floor?

02:15 9 A. Precisely.

02:15 10 Q. Okay. So in this backlight, there's no
02:15 11 quantum dots?

02:15 12 A. No. There are not.

02:15 13 MR. BURESH: Could we go to the next
02:15 14 slide, please?

02:15 15 BY MR. BURESH:

02:15 16 Q. Now, here, is this your hand we're seeing?

02:15 17 A. Is this what?

02:15 18 Q. The blue glove, is that you?

02:15 19 A. I'm not sure about that. It might be me.
02:15 20 Yes.

02:15 21 Q. Okay. But what we have here is a series of
02:15 22 optical films, correct?

02:15 23 A. Yes, sir.

02:15 24 Q. Okay. I believe you said first there was a
02:15 25 prism sheet on top working our way down?

02:15 1 A. No, sir.

02:15 2 Q. What's the top one?

02:16 3 A. The top one in this particular product I
02:16 4 believe is a diffuser.

02:16 5 Q. Okay. A diffuser.

02:16 6 How long have diffuser sheets been around?

02:16 7 Let me narrow this down. Well before 2009?

02:16 8 A. Yes, sir.

02:16 9 Q. You can go to any number of different vendors
02:16 10 and buy a diffuser sheet, right?

02:16 11 A. Yes.

02:16 12 Q. Okay. You didn't come up with that?

02:16 13 A. No, sir.

02:16 14 Q. Okay. Let's go to next layer down. What's
02:16 15 that one?

02:16 16 A. I believe that's another diffuser sheet.

02:16 17 Q. Okay. Same answers. It's been around a long
02:16 18 time before your 2009 work that you were doing, right?

02:16 19 A. Yes. The concept of diffuser sheets, yes.

02:16 20 Q. And you can --

02:16 21 A. It was.

02:16 22 Q. Well before 2009, you could buy these multiple
02:16 23 places on the market?

02:16 24 A. I'm not sure about these, but yes. You can
02:16 25 buy some forms of diffuser sheets. Yes. Some types.

02:16 1 Q. What's the next one down?

02:17 2 A. It's, I believe, yet another diffuser sheet.

02:17 3 Q. So same answers?

02:17 4 A. Yes, sir.

02:17 5 Q. Now, beneath that is the light guide?

02:17 6 A. That is correct.

02:17 7 Q. And then beneath that is a reflector sheet?

02:17 8 A. That is correct.

02:17 9 Q. Now, reflector sheets were around a long time
02:17 10 before 2009?

02:17 11 A. Yes, sir.

02:17 12 Q. Widely available?

02:17 13 A. Yes, sir.

02:17 14 Q. Okay. Now, this light guide that I kind of
02:17 15 skipped over, let's spend a little more time there.

02:17 16 Light guides for backlights have been around
02:17 17 long before 2009?

02:17 18 A. Light guides were -- yes. They were available
02:17 19 before.

02:17 20 Q. Okay. Edge-lit light guides have been around
02:17 21 a long time before 2009?

02:17 22 A. Well, I'm not sure about your characterization
02:17 23 of "long time." Yes. But they were known at the time.

02:18 24 Q. Okay. How about ten years before?

02:18 25 A. I'm not sure about that.

02:18 1 Q. Okay. But before 2009?

02:18 2 A. Right.

02:18 3 Q. And by edge-lit, we mean if we hold up the
02:18 4 piece of plastic, we're pumping light into the thin
02:18 5 edge, right? Have an edge-lit light guide?

02:18 6 A. Yes.

02:18 7 Q. Using LED lights, right?

02:18 8 A. Yes.

02:18 9 Q. Now, I believe you said during your direct,
02:18 10 and I just want to check this to confirm I heard you
02:18 11 right, that by 2009 most edge-lit backlights were using
02:18 12 fluorescent tubes?

02:18 13 A. Correct.

02:18 14 Q. You're sure of that?

02:18 15 A. Yes, sir.

02:18 16 Q. Now, during your description of your teardown
02:19 17 as well as your patents, you never mentioned the LCD
02:19 18 component, the piece that was up against the wall, at
02:19 19 all, did you?

02:19 20 A. I believe I mentioned it in one way or
02:19 21 another.

02:19 22 Q. But that was not part of your inventive work
02:19 23 in your opinion?

02:19 24 A. Right. That's correct.

02:19 25 Q. Now, an LCD, that's the part when you hear

02:19 1 about the number of pixels. The pixels are in the
02:19 2 liquid crystal display, right?

02:19 3 A. Correct.

02:19 4 Q. They're not the little dots that you've been
02:19 5 pointing to, the surface deflection features. Pixels
02:19 6 are in the LCD?

02:19 7 A. Yes.

02:19 8 Q. And the way pixels work is they're basically
02:19 9 millions of little shutters to let light out at
02:19 10 specific times and specific ways to create an image?

02:20 11 A. Yes.

02:20 12 Q. And you didn't have anything to do with that
02:20 13 in your invention or that in my client's products,
02:20 14 right?

02:20 15 A. You combined like two different substances.
02:20 16 Can you like --

02:20 17 Q. You didn't have --

18 A. -- rephrase your question?

02:20 19 Q. -- anything to do with that in my client's
02:20 20 products, the LCD component?

02:20 21 A. No.

02:20 22 Q. You showed the jury a flexible LED panel.
02:20 23 Do you recall your testimony about that?

02:20 24 A. Yes, sir.

02:20 25 Q. Can I pick this up? Do I have your

02:20 1 permission?

02:20 2 A. The box?

02:20 3 Q. Where did the LED panel go?

02:20 4 (Conference between counsel.)

02:21 5 BY MR. BURESH:

02:21 6 Q. Do you mind?

02:21 7 A. If my counsel does not mind.

02:21 8 MR. MCCARTY: It's okay. Do you need
02:21 9 some help?

02:21 10 THE WITNESS: May I ask you to handle by
02:21 11 the edges only?

02:21 12 Yes. Thank you. Appreciate that.

02:21 13 BY MR. BURESH:

02:21 14 Q. Now, this is not a backlight for an LED panel,
02:21 15 is it?

02:21 16 A. It's a component that can be a part of a
02:21 17 backlight.

02:21 18 Q. You can see through this, can't you?

02:21 19 A. Yes, sir. You can.

02:21 20 Q. Now, when you get my client's product out,
02:21 21 which I think the jury will see pretty soon in this
02:21 22 case, can you see through the light guides?

02:21 23 A. You don't see the light guide in the display
02:22 24 because it's hidden underneath the screen.

02:22 25 Q. When you tear down a product and you get a

02:22 1 light guide out of it, can you see through it like
02:22 2 this?

02:22 3 A. Not like that, but in some portions, yes. It
02:22 4 would be more or less transparent. In some, it would
02:22 5 not.

02:22 6 Q. In my client's, are they transparent or not?

02:22 7 A. Oh, no. They're not transparent like that.

02:22 8 Q. They're not like this?

02:22 9 A. No.

02:22 10 Q. Okay. Now, when you turned this on, as you
02:22 11 did, it was pretty dadgum bright, wasn't it?

02:22 12 A. I believe it was.

02:22 13 Q. Would we want a display pumping out the degree
02:22 14 of bright light that these folks saw this morning?

02:22 15 A. For backlight, you would want it.

02:22 16 Q. Well, for a big light you would. But how
02:22 17 about for a display screen that we have to look at
02:22 18 while we're reading patents? Would we want all that
02:23 19 light being blasted into our eyes like the jury saw
02:23 20 this morning?

02:23 21 A. It won't blast it into their eyes because it
02:23 22 will be behind the LCD display.

02:23 23 Q. I didn't ask that. Do we want the degree of
02:23 24 light that this put out in the jury's eyes this morning
02:23 25 coming at us from a display, yes or no?

02:23 1 A. In some applications, probably you won't, if
02:23 2 it is for indoors. But for outdoors, you might need it
02:23 3 to be that bright.

02:23 4 Q. So it kind of comes down to the application,
02:23 5 doesn't it?

02:23 6 A. It depends on what you ask about.

02:23 7 Q. Whether you want super bright light or not
02:23 8 depends on the application, doesn't it?

02:23 9 A. To some extent, yes.

02:23 10 Q. Because you might have a LED display along the
02:23 11 highway pumping out gigawatts -- I don't even know what
02:24 12 the term is -- a whole bunch of light so that people
02:24 13 can see it from the highway. You might want that.
02:24 14 That'd be an application that would have a benefit from
02:24 15 really bright light coming out, fair?

02:24 16 A. Fair.

02:24 17 Q. But if we're looking at these screens in front
02:24 18 of us and we're trying to look at them for long periods
02:24 19 of time because we're sitting at a desk working, do we
02:24 20 want really bright light coming out at us, yes or no?

02:24 21 A. You need at least a minimum brightness, and in
02:24 22 many cases, you want it to be as bright as possible to
02:24 23 a certain degree. But there's like a -- kind of like a
02:24 24 range of brightness that would -- you would need to
02:24 25 have.

02:24 1 Q. This is simple. I got to sit in front of this
02:24 2 monitor for the next six hours staring at it.

02:24 3 Do you think that I want really bright light
02:24 4 coming into my eyes? Yes or no?

02:24 5 A. It depends on your application. If you are a
02:25 6 gamer and you use like a gaming monitor, then you would
02:25 7 want like the so-called HGR. And the HGR requires the
02:25 8 monitor to be output in exceptionally bright.

02:25 9 Q. So you think gamers want to be blinded?

02:25 10 A. Well, I hope the jury did not get blinded from
02:25 11 this panel.

02:25 12 Q. I mean, I was almost blinded from across the
02:25 13 room. I was scared for what was happening in front of
02:25 14 them. Given too long in front of that, they might
02:25 15 start tanning. It's a lot of light, isn't it?

02:25 16 A. It is a lot of light. Yeah. We're very proud
02:25 17 of that, that we were able to achieve that kind of
02:25 18 brightness.

02:26 19 MR. BURESH: Could we go to the slides
02:26 20 for SVV, please? The Vasylyev slides. PDX. Let's go
02:26 21 with 2.3.

02:26 22 BY MR. BURESH:

02:26 23 Q. This was from your testimony today.

02:26 24 Do you recognize it?

02:26 25 A. Yes, sir.

02:26 1 Q. Okay. The solar energy appliance on the left,
02:26 2 not a display monitor, right?

02:26 3 A. It is not.

02:26 4 Q. The daylight redirecting window film in the
02:26 5 middle, that's something you put on your windows, not a
02:26 6 display monitor, correct?

02:26 7 A. That is correct.

02:26 8 Q. And this daylight film doesn't have anything
02:26 9 to do with the patents either, right?

02:26 10 A. No. I don't believe it doesn't have to do
02:27 11 anything this patent, except that it uses similar
02:27 12 concepts and some microstructures in it. But it's not
02:27 13 part of the claimed invention.

02:27 14 Q. It doesn't use the patents?

02:27 15 A. Pardon me? No. It does not use the patents.
02:27 16 That would be a better way to put it.

02:27 17 Q. Now, the flexible panel that we've been
02:27 18 talking about, it's used for general lighting like
02:27 19 replacing fluorescent fixtures in commercial buildings
02:27 20 or making architectural or decorative lighting; isn't
02:27 21 that correct?

02:27 22 A. It's one of the many applications of these
02:27 23 panels, but there are many more.

02:27 24 Q. This flexible LED panel is not a display
02:27 25 monitor?

02:27 1 A. It is not, sir.

02:27 2 Q. And in fact, it is different from your
02:28 3 patents?

02:28 4 A. Yes, sir. If you are talking about these
02:28 5 particular patents, yes.

02:28 6 Q. Yeah. These four.

02:28 7 A. Yes. It's different.

02:28 8 Q. So all of the products that you've shown to
02:28 9 the jury here on these slides, none of them was a
02:28 10 monitor?

02:28 11 A. That is correct.

02:28 12 Q. And you've never sold a computer monitor?

02:28 13 A. No, sir.

02:28 14 Q. You've never sold components for use in a
02:28 15 computer monitor?

02:28 16 A. No, sir.

02:28 17 Q. You've never sold an LCD panel backlight like
02:28 18 the ones we're talking about in this case, correct?

02:28 19 A. I'm not sure that that would be the --
02:28 20 correct. So we have sold some backlights.

02:28 21 Q. Have you ever sold an LCD panel backlight?

02:29 22 A. No.

02:29 23 Q. Now, to be clear, you've never actually sold
02:29 24 any product that embodies the inventions in these four
02:29 25 asserted patents, have you?

02:29 1 A. No, sir.

02:29 2 Q. You also talked --

02:29 3 MR. BURESH: Let's go to the next slide,

02:29 4 PDX-2.4.

02:29 5 BY MR. BURESH:

02:29 6 Q. You talked about some awards and some grants

02:29 7 that you got during your testimony?

02:29 8 A. Correct.

02:29 9 Q. Okay. Now, those awards, you can't say any of

02:29 10 those were for the inventions described in these four

02:29 11 asserted patents, can you?

02:29 12 A. No, sir.

02:29 13 Q. And the public recognition that your lawyer

02:30 14 and you talked about, you can't say that any of that

02:30 15 recognition was for the inventions described in these

02:30 16 patents, can you?

02:30 17 A. Yes. That's correct.

02:30 18 Q. Finally, these grants from the U.S. Department

02:30 19 of Energy and California Energy Commission, those sorts

02:30 20 of things, none of them were used to develop any of the

02:30 21 inventions described in the asserted patents?

02:30 22 A. That's correct.

02:30 23 Q. We also saw after the light lesson a picture

02:31 24 of a big TV.

02:31 25 Do you remember that?

02:31 1 A. Yes, sir.

02:31 2 Q. And you talked about how you were making TVs
02:31 3 thinner?

02:31 4 A. I disagree with your characterization.

02:31 5 Q. Well, you thought your invention would lead to
02:31 6 TVs or monitors being thinner?

02:31 7 A. Yes. That would be a correct statement but
02:31 8 not the previous one.

02:31 9 Q. But again, you didn't show the jury anything
02:31 10 to give them an opportunity with their own two eyes to
02:31 11 see that that's actually the case, did you?

02:31 12 A. Well, I showed the examples of the products
02:31 13 that they have developed which can be components of the
02:31 14 TVs or monitors.

02:31 15 Q. Did you ever look around and say, I could -- I
02:31 16 could buy the liquid crystal component from a vendor
02:31 17 just like ASUS does? You could do that, right?

02:31 18 A. I'm not sure about that.

02:32 19 Q. Did you ever try?

02:32 20 A. Yes.

02:32 21 Q. Okay. Did you ever try to build these -- or
02:32 22 excuse me -- buy these various optical films from a
02:32 23 vendor?

02:32 24 A. Yes.

02:32 25 Q. Did you put together a monitor?

02:32 1 A. No, sir. If you're talking about computer
02:32 2 monitors, no. LCD monitor.

02:32 3 Q. So you can't say with any certainty based upon
02:32 4 real-world prototypes or testing that your product even
02:32 5 works the way you've described it, can you?

02:32 6 A. I'm pretty sure that it will work.

02:32 7 Q. Just like I was pretty sure my paper airplane
02:32 8 was going to fly?

02:32 9 A. So what's your question?

02:32 10 Q. You have not shown me, have you?

02:32 11 A. Anybody in the field of optics will recognize
02:33 12 and understand that these systems will apply and work.

02:33 13 Q. I seriously doubt that. But we do have your
02:33 14 opinion.

02:33 15 Now, you are the sole shareholder of SVV,
02:33 16 right?

02:33 17 A. That is correct.

02:33 18 Q. You control where the money goes?

02:33 19 A. Yes, sir.

02:33 20 Q. So if you win this case, big -- you know, all
02:33 21 this money you're asking for, if you got it, it would
02:33 22 come to you, right?

02:33 23 A. No, sir.

02:33 24 Q. Come to your company that you fully control?

02:33 25 A. That is correct.

02:33 1 Q. Okay. Do you think it's possible that when
02:33 2 you have that kind of interest in this case, that your
02:33 3 view might be skewed just a little bit?

02:33 4 A. That is wrong.

02:33 5 Q. We're all human here. A giant self-interest,
02:34 6 you don't think that skews your view in my way?

02:34 7 A. I don't think so.

02:34 8 Q. Okay. Now, when you went through the process
02:34 9 of preparing the claim charts -- and I think the
02:34 10 testimony was you prepared the claim charts that were
02:34 11 sent by your lawyer to ASUS, correct?

02:34 12 A. Okay.

02:34 13 Q. Is that correct?

02:34 14 A. Yes, sir.

02:34 15 Q. Is it possible that when you were preparing
02:34 16 your claim charts, your view of how you might interpret
02:34 17 one thing or another could be a little off because of
02:34 18 your goals?

02:34 19 A. No, sir. I completely disagree with that.

02:34 20 Q. Okay. Let me ask it this way: You're not
02:34 21 trained in the law, are you?

02:34 22 A. No, sir.

02:34 23 Q. And you can't really tell the jury anything
02:35 24 about infringement, can you?

02:35 25 A. I have certain expertise, but I'm -- certain

02:35 1 knowledge, but I'm not expert in assessing
02:35 2 infringement. Yes.

02:35 3 Q. In fact, you wouldn't be in a position to even
02:35 4 make a connection between the claim charts you put
02:35 5 together and a finding of infringement.

02:35 6 You're just not positioned to do that, are
02:35 7 you?

02:35 8 A. I don't believe so. I mean, I disagree with
02:35 9 what you're saying.

02:35 10 Q. So you said you disagree with me?

02:35 11 A. Right.

02:35 12 Q. Okay. Let me ask you this: The claim charts
02:35 13 you made are identifying, in your opinion, how ASUS
02:35 14 products infringe the particular patents discussed
02:35 15 here?

02:36 16 A. Yes, sir.

02:36 17 Q. You agree the term "infringement," it's sort
02:36 18 of a legal term?

02:36 19 A. Yes.

02:36 20 Q. Okay. So at the time you were deposed in this
02:36 21 case, you could not express any opinion whatsoever
02:36 22 about infringement, could you?

02:36 23 A. I'm not sure that I would agree with your
02:36 24 characterization of what I said.

02:36 25 Q. You have no understanding of what the term

02:36 1 "infringement" means; is that correct?

02:36 2 A. That is incorrect.

02:36 3 Q. But you cannot testify to any questions that
02:36 4 would include the notion of infringement?

02:36 5 A. No. I cannot provide legal opinion or to be
02:36 6 precise in the absolute legal terms, but I can
02:36 7 understand how the infringement works to a certain
02:36 8 extent, to the extent I was able to actually map those
02:36 9 products and create the claim charts.

02:36 10 Q. Let me break this down as simply as I can.

02:37 11 You cannot testify on the questions that would
02:37 12 include any meaning of the word "infringement," can
02:37 13 you?

02:37 14 A. Right.

02:37 15 Q. And you're not trying to tell this jury that
02:37 16 you've reached conclusions of infringement because you
02:37 17 can't do that?

02:37 18 A. Right. I believe that these products were
02:37 19 infringing based on my analysis, but we have dedicated
02:37 20 expert who will testify specifically on the
02:37 21 infringement.

02:37 22 Q. I understand your opinion. And my final
02:37 23 question to you is: You're not entitled to offer that
02:37 24 opinion, are you?

02:37 25 A. I'm not sure about that.

02:37 1 MR. BURESH: I pass the witness,
02:37 2 Your Honor.

02:37 3 MR. MCCARTY: Your Honor, may we approach
02:37 4 quickly?

02:37 5 THE COURT: Yes.

02:37 6 (Bench conference.)

02:37 7 MR. MCCARTY: On cross-examination,
02:38 8 Your Honor, Mr. Buresh opened the door on several MILs
02:38 9 relating to the Court's claim construction order.
02:38 10 Specifically the dispute in the claim construction was
02:38 11 whether the terms --

02:38 12 THE COURT: We're not going into anything
02:38 13 that was debated during construction.

02:38 14 MR. MCCARTY: Exactly. And that's what
02:38 15 just happened. He's told --

02:38 16 THE COURT: The time to deal with that
02:38 17 was when he asked it and you could object.

02:38 18 MR. MCCARTY: Okay. But this is a -- we
02:38 19 blew right through that MIL and I need some help
02:38 20 understanding whether or not --

02:38 21 MR. BURESH: I didn't even talk about a
02:38 22 claim term.

02:38 23 MR. MCCARTY: Absolutely.

02:38 24 THE COURT: This isn't between you two.

02:38 25 MR. BURESH: Sorry, Your Honor.

02:38 1 MR. MCCARTY: If I could, Your Honor.

02:38 2 THE COURT: So what is it you want to ask
02:38 3 him?

02:38 4 MR. MCCARTY: So there are three issues.
02:38 5 The first is, the quote is, the products don't convert
02:38 6 light to electricity like you say in your patents.
02:38 7 That's what he just said. That is precisely the
02:38 8 argument that Your Honor rejected and ended up being
02:38 9 our claim construction order.

02:38 10 The same exact thing happened with the
02:38 11 light harvesting term. It's a very specific thing.

02:38 12 THE COURT: Well, you can have your
02:38 13 expert explain why the answers he gave are irrelevant
02:39 14 to the -- in your opinion are irrelevant to
02:39 15 infringement because they're not part of my claim
02:39 16 construction.

02:39 17 MR. MCCARTY: So there's one additional
02:39 18 thing that I wanted to raise, which is the fact
02:39 19 that this actually came up at the pretrial order
02:39 20 because they were --

02:39 21 THE COURT: No. Let me back up and say
02:39 22 your expert can't go and say, no. They argued that at
02:39 23 claim construction. What he can say, you were here
02:39 24 when counsel asked the inventor this and he said that,
02:39 25 does that have anything to do with infringement? No.

02:39 1 Why not? Because what the Court said was X.

02:39 2 MR. MCCARTY: Okay. I'm just clarifying
02:39 3 that because --

02:39 4 THE COURT: I got it.

02:39 5 MR. MCCARTY: Yeah, okay. Thank you.

02:39 6 THE COURT: But what doesn't come up is a
02:39 7 dispute -- anything happened prior to me giving the
02:39 8 construction. What you wanted, what they wanted,
02:39 9 whatever that is. That doesn't matter now.

02:39 10 If you think that counsel's trying to
02:39 11 mislead the jury by asking something that doesn't fall
02:39 12 within the ambit of my claim construction, that is
02:39 13 appropriate for you to deal with but not with this
02:40 14 witness.

02:40 15 MR. MCCARTY: Okay.

02:40 16 THE COURT: Another reason, he wasn't at
02:40 17 the claim construction.

02:40 18 MR. MCCARTY: Yeah. So I think it's
02:40 19 appropriate for Mr. Credelle to do it and we can
20 address that at that time.

21 THE COURT: Okay.

02:40 22 MR. MCCARTY: Thank you.

02:40 23 (Bench conference concludes.)

24 MR. MCCARTY: Just some follow-up, if I
25 may, Your Honor?

REDIRECT EXAMINATION

BY MR. MCCARTY:

Q. Dr. Vasylyev, thank you for your testimony.

There was an insinuation about money coming into your company and maybe to you.

Do you recall those questions?

A. Yes, sir.

Q. Are you trying to get rich off this case, sir?

A. Not at all.

Q. Can you explain to the jury where money from licensing and things like this go to and what they're used for?

A. Yeah. First of all, the jury needs to understand that I have to pay very significant bill -- legal bill for being represented in this case. Then typically what happens to the rest -- to what's left, roughly half goes into taxes because in California in addition to federal taxes, we also have California tax.

And then the remaining proceeds of some -- my plan is to use this money to further grow the business, to create new technologies and products, and also expand into new markets so that we can be a leading manufacturer of lighting technologies that use our patented -- patents in particular.

Q. Thank you.

02:41 1 Now, there were some questions about the term
02:41 2 "light trapping."

02:41 3 Do you recall those questions?

02:41 4 A. Yes, sir.

02:41 5 Q. Okay. Mr. Buresh seemed to be acting like
02:42 6 light trapping is not related to the displays at issue
02:42 7 in this case.

02:42 8 Did you get that sense?

02:42 9 A. Yes. It sounded like that.

02:42 10 Q. Do you agree with that?

02:42 11 A. No.

02:42 12 Q. Okay. What did you explain earlier about the
02:42 13 relationship between light trapping and total internal
02:42 14 reflection in the products at issue in this case?

02:42 15 A. Right. So there are different ways how light
02:42 16 trapping works in the LCD displays. One way would be
02:42 17 how the light is trapped is in the light guide itself.

02:42 18 And if you remember, I was explaining how the
02:42 19 light is, you know, confined in that light guide so it
02:42 20 bounces back and forth. So it actually stays trapped
02:42 21 until it is extracted by those microstructures when
02:42 22 it -- where it's needed so that you can get a very
02:42 23 uniform light.

02:42 24 Q. And that's for displays, correct?

02:42 25 A. Yes. It's for displays, just one example.

02:42 1 Another example of light trapping would be
02:42 2 when you use the quantum dot film, then you have
02:43 3 another play with light trapping when you have light
02:43 4 bouncing back and forth between like top layer, which
02:43 5 would be in that case the so-called brightness
02:43 6 enhancement film and reflector on the back.

02:43 7 So the light actually bounces back and forth
02:43 8 multiple times so that it can pass through that quantum
02:43 9 dot film many, many times, and so you can get a richer
02:43 10 color and that would provide you an improved color
02:43 11 gamut.

02:43 12 And you can also save costs on using less
02:43 13 quantum dot materials which are -- by themselves are
02:43 14 very and very expensive.

02:43 15 Q. In order to determine the infringement of the
02:43 16 patents, do we look at the title of the patent?

02:43 17 A. No, sir.

02:43 18 Q. The summary of the patent?

02:43 19 A. No, sir.

02:43 20 Q. The background of the patent?

02:43 21 A. Not at all.

02:43 22 Q. The abstract of the patent?

02:43 23 A. No.

02:43 24 Q. What do we look at?

02:43 25 A. We're looking at claims specifically.

02:43 1 Q. Did Mr. Buresh go through all the claims in
02:43 2 this case?

02:43 3 A. No. None.

02:43 4 Q. Do you understand that that is a rule, or is
02:44 5 that the test for patent infringement?

02:44 6 A. Yes, sir.

02:44 7 Q. Do you remember some questions about how like
02:44 8 the '342 patent and the '562 patent don't mention
02:44 9 quantum dots?

02:44 10 A. Yes. I remember.

02:44 11 Q. Okay. Are those patents even applying or
12 applicable to the quantum dot products at issue in this
02:44 13 case?

02:44 14 A. No, sir.

02:44 15 Q. Now, regarding quantum dots --

02:44 16 MR. MCCARTY: Could I have the '089
02:44 17 patent? Let's look at the abstract. If you could zoom
02:44 18 in in that, Mr. Diaz.

02:44 19 BY MR. MCCARTY:

02:44 20 Q. It says: The light trapping optical structure
02:44 21 includes a photoresponsive layer including
02:44 22 semiconductor quantum dots.

02:44 23 Did I read that correctly, sir?

02:44 24 A. Yes.

02:44 25 Q. Does that say anything about converting to

02:45 1 electricity?

02:45 2 A. No, sir.

02:45 3 Q. Does that say anything about photovoltaic or
02:45 4 solar energy?

02:45 5 A. No, sir.

02:45 6 Q. Can you explain to the jury why quantum dots
02:45 7 can change light to particular colors?

02:45 8 A. Yes. So it's not about like being -- them
02:45 9 being of specific type. Actually it's the size of the
02:45 10 quantum dots that defines the color in which they need
02:45 11 light. So that's important to understand.

02:45 12 MR. MCCARTY: Mr. Diaz, could we have the
02:45 13 '318 patent? If we could go to Column 15, Lines 15
02:45 14 through 25.

02:45 15 BY MR. MCCARTY:

02:45 16 Q. The suggestion I got from counsel for ASUSTeK
02:45 17 was that the '318 patent had no discussion of anything
02:45 18 related to this case.

02:45 19 Do you recall that insinuation?

02:45 20 A. Yes.

02:45 21 Q. Okay. If we could look down here at the
02:46 22 patent -- '318 patent. What have I underlined there,
02:46 23 sir?

02:46 24 A. It says: Optical waveguides, lighting panels.

02:46 25 Q. Do you remember showing this to the jury, sir?

02:46 1 A. Yes, sir.

02:46 2 Q. PTX-109.010?

02:46 3 A. Yes.

02:46 4 Q. Is this one of the products in the case?

02:46 5 A. Correct.

02:46 6 Q. Is that film right there an optical waveguide?

02:46 7 A. It is a waveguide.

02:46 8 Q. And is that waveguide inside of a lighting
02:46 9 panel?

02:46 10 A. That is correct.

02:46 11 Q. In the products at issue in this case?

02:46 12 A. Yes, sir.

02:46 13 Q. Do you remember being asked questions about --
02:46 14 well, let me ask you: In direct examination, do you
02:46 15 recall answering questions about how you filed several
02:47 16 different applications?

02:47 17 A. Yes.

02:47 18 Q. Can you explain to the jury how filing
02:47 19 different applications allows you to cover different
02:47 20 aspects of your invention?

02:47 21 A. Yes.

02:47 22 Q. Please go ahead.

02:47 23 A. Yes. So basically a single application can
02:47 24 describe multiple inventions. In fact, there can be
02:47 25 many and many inventions described in a single patent

02:47 1 application.

02:47 2 And then in your claims, you can direct your
02:47 3 specific invention to a particular application, or one
02:47 4 or two, or a specific implementation.

02:47 5 And then in continuation applications, for
02:47 6 example, you can like file additional patent
02:47 7 applications that are based on your initial one where
02:47 8 you can explore further applications and describe more
02:47 9 and more applications.

02:47 10 So this is how -- how it works. So basically
02:47 11 in a single patent -- the bottom line is, in a single
02:47 12 patent, you can describe and then claim many different
02:47 13 technologies and many different applications as long as
02:48 14 you have them described in the patent.

02:48 15 Q. Did you get the sense from some of these
02:48 16 questions that Mr. Buresh was trying to insinuate that
02:48 17 your inventions were limited to solar energy?

02:48 18 A. I do.

02:48 19 Q. Have companies paid for the right to practice
02:48 20 your patents?

02:48 21 A. Yes, sir.

02:48 22 Q. Can you name one?

02:48 23 A. MSI.

02:48 24 Q. Is that a solar energy company?

02:48 25 A. No, sir. They make computer monitors.

02:48 1 Q. Are there any other companies that have paid
02:48 2 for the right to practice those patents?

02:48 3 A. Would be Samsung.

02:48 4 Q. Is Samsung a big solar energy company?

02:48 5 A. I don't believe so.

02:48 6 Q. Was that issue about computer monitors and --

02:48 7 A. Yes. That was about computer monitors.

02:48 8 Q. Now, do you recall answering some questions
02:48 9 about the kind of back-and-forth between Mr. Katz, your
02:48 10 attorney, and the folks at ASUSTeK before?

02:48 11 A. Yes, sir.

02:48 12 Q. Mr. Buresh kept calling it "collegial."

02:49 13 Do you recall that?

02:49 14 A. Yes.

02:49 15 Q. Are you certain -- or do you ensure that your
02:49 16 attorneys and your representatives working on your
02:49 17 behalf are respectful to other people?

02:49 18 A. I believe it's very important.

02:49 19 Q. Like always respectful?

02:49 20 A. Yes.

02:49 21 Q. Do you think that you should be blamed for
02:49 22 making sure that your folks that represent you are
02:49 23 respectful to others?

02:49 24 A. Yes. No. I believe that I -- yeah, should
02:49 25 not be blamed for that.

02:49 1 MR. MCCARTY: Could we go to PTX-30,
02:49 2 Mr. Diaz, and go to the December 2nd e-mail?

02:49 3 And could we please go down one more to
02:49 4 Mr. Katz's e-mail? Yes. It says: Hi, Jason. Or
02:49 5 sorry. Yeah. Just there.

02:49 6 BY MR. MCCARTY:

02:49 7 Q. Now, when Mr. Buresh was going through this
02:49 8 correspondence, it seemed to me like the insinuation
02:50 9 was that Mr. Katz, your attorney, was asking for
02:50 10 information on how to contact the third-party suppliers
02:50 11 and manufacturers.

02:50 12 Do you recall that?

02:50 13 A. Yeah. It sounded like that.

02:50 14 Q. But did he come up with that notion out of the
02:50 15 blue?

02:50 16 A. No.

02:50 17 MR. MCCARTY: Pete, if you'd go to the
02:50 18 Jason Wu e-mail. December 2nd.

02:50 19 BY MR. MCCARTY:

02:50 20 Q. Who gave him the idea that he probably needs
02:50 21 to go talk to somebody else in the first place?

02:50 22 A. I'm sorry. Can you repeat?

02:50 23 Q. Who gave Mr. Katz the idea that he needs to
02:50 24 talk to someone other than ASUSTeK?

02:50 25 A. Oh, actually, that was said by the ASUS.

02:50 1 Q. So ASUS told him to go talk to somebody else?

02:50 2 A. Exactly. Yes. So they tried to redirect.

02:51 3 Q. Do you recall questions about whether or not

02:51 4 you make all the components of an LCD monitor?

02:51 5 A. Yes. I do.

02:51 6 Q. And do you make full LCD monitors to sell in

02:51 7 the market?

02:51 8 A. No, sir.

02:51 9 Q. Is there another company in the room that

02:51 10 doesn't make LCD monitors?

02:51 11 A. Yes.

02:51 12 Q. Who's that?

02:51 13 A. Would be ASUS.

02:51 14 Q. Do you think it's a fair line of questioning?

02:51 15 A. No.

02:51 16 Q. Does it relate to whether or not they infringe

02:51 17 your patent?

02:51 18 A. No, sir.

02:51 19 Q. You showed your light guide plate, and there
02:51 20 was a question about whether or not it was transparent.

02:51 21 Do you remember that?

02:51 22 A. Yes, sir.

02:51 23 Q. You know some of the patent claims require
02:51 24 that they're transparent, right?

02:51 25 A. Yes.

02:51 1 Q. And so when you said that the ASUSTeK products
02:51 2 weren't transparent, you were referring to in
02:51 3 comparison to that particular product, correct?

02:51 4 A. Correct. So you cannot see, like, objects
02:52 5 clearly behind it because you have like this complex
02:52 6 structure. But the material itself is of course
02:52 7 transparent.

02:52 8 Q. It is your job in this case to prove
02:52 9 infringement?

02:52 10 A. No, sir. Not my role in this case.

02:52 11 Q. You're a fact witness, correct?

02:52 12 A. Correct.

02:52 13 Q. Okay. Whose job is it to come in here and
02:52 14 explain to the jury how the infringement works?

02:52 15 A. It would be Mr. Credelle. So he will be
02:52 16 testifying on that.

02:52 17 Q. Now, do you recall questions at the end there
02:52 18 about whether your invention benefits products by
02:52 19 making them thinner?

02:52 20 A. Yes.

02:52 21 Q. And you were asked if you had any -- seen any
02:52 22 evidence or shown any evidence that your invention
02:52 23 actually offers a benefit.

02:52 24 Do you recall that?

02:52 25 A. Yes.

02:52 1 Q. When you performed your analysis of all the
02:52 2 products that we went through today of ASUSTeK's, did
02:52 3 you find some that did not have your invention in them?

02:52 4 A. Yes. I did.

02:53 5 Q. How many total did you cut up?

02:53 6 A. The ones that did not infringe?

02:53 7 Q. Total.

02:53 8 A. Total. Well, dozens and dozens. So --

02:53 9 Q. And every once in a while, there'd be one that
02:53 10 did not have your technology?

02:53 11 A. Right. Let's say roughly speaking, we found
02:53 12 like 60-plus, like, infringing and maybe 20, 25 not
02:53 13 infringing.

02:53 14 Q. Is one of the products that you cut open that
02:53 15 did not have your technology in it the VG27AQ?

16 A. Yes.

02:53 17 MR. MCCARTY: Mr. Diaz, could I get
02:53 18 Slide 13 up there from a couple of extra slides? I
02:53 19 think it's the other set of slides that I just made up
02:53 20 for you.

21 BY MR. BURESH:

02:53 22 Q. Okay. What are we looking at here, sir?

02:53 23 A. So we're looking at like very close photograph
02:54 24 of like individual LEDs that are used in that display.
02:54 25 And also we see their measurements. The measurements

02:54 1 of their, like, dimensions.

02:54 2 Q. And did you analyze the same thing for a
02:54 3 product at issue in the case, the VG27AQL1A?

02:54 4 A. Yes, sir.

02:54 5 MR. MCCARTY: Go to the next slide.

6 BY MR. BURESH:

02:54 7 Q. Did the LED get smaller?

02:54 8 A. Yes. Considerably smaller.

02:54 9 MR. MCCARTY: Can you go to the next
02:54 10 slide?

02:54 11 BY MR. MCCARTY:

02:54 12 Q. Tell me what we're seeing here and how that
02:54 13 works.

02:54 14 A. Yeah. So on this slide, like on the top, on
02:54 15 the top line, you see the LEDs that are used in the
02:54 16 product that is not using my patented technology. And
02:54 17 on the bottom, you can see the product that is using my
02:54 18 patented technology. And you can see how big a
02:54 19 difference in the amount of LED materials used in those
02:54 20 displays.

02:54 21 Q. And so the LEDs got smaller?

02:54 22 A. The LEDs got smaller. So if you, like,
02:54 23 compare the area, I think it's like 1.7 times'
02:55 24 reduction. If you compare like the whole -- the volume
02:55 25 occupied by LEDs, that would be like 2.4 times'

02:55 1 reduction. It's a huge reduction in the use of raw and
02:55 2 pretty expensive materials.

02:55 3 Q. Are there other materials that you don't need
02:55 4 when you use your technology?

02:55 5 A. Yes. So basically, there are actually several
02:55 6 areas where you can benefit and reduce the amount of
02:55 7 raw materials. For example, in the optical layers.
02:55 8 Let's talk about them first.

02:55 9 So you can get a thinner light guide and save
02:55 10 on that, you know, optical plastic, which is much more
02:55 11 expensive than a conventional plastic. You can use
02:55 12 thinner -- a smaller number and thinner optical layers
02:55 13 like those diffusers.

02:55 14 You can also -- besides just optical layers,
02:55 15 you can also save on LEDs as well, just as you've seen
02:56 16 before, just on this slide, for example.

02:56 17 Also, these, like, pad on which the LEDs are
02:56 18 mounted, which is called the "PCB," or printed circuit
02:56 19 board, so it has like a special metal core.

02:56 20 MR. BURESH: Your Honor, it took me a
02:56 21 minute to confirm. I don't believe we've ever seen
02:56 22 this before.

02:56 23 MR. MCCARTY: I'll get you a copy.

02:56 24 MR. BURESH: I don't need a copy. I've
02:56 25 never seen it before.

02:56 1 MR. MCCARTY: It's your products.

02:56 2 THE COURT: Counsel, if he hasn't seen
02:56 3 this slide before.

02:56 4 MR. MCCARTY: You can take it down,
02:56 5 please.

02:56 6 MR. BURESH: Why are you putting -- I'm
02:56 7 sorry, Your Honor.

8 THE WITNESS: Do I need to continue?

02:56 9 MR. MCCARTY: That's okay.

02:56 10 Dr. Vasylyev, thank you for your
02:56 11 testimony. Appreciate your time. Thank you.

02:56 12 THE WITNESS: You're welcome.

02:56 13 THE COURT: Any other questions?

02:56 14 MR. BURESH: Can we approach?

02:56 15 THE COURT: Yes.

02:56 16 (Bench conference.)

02:56 17 MR. BURESH: Gave it to me the night
02:57 18 before.

02:57 19 THE COURT: Gentlemen, you talk to me.

02:57 20 MR. BURESH: I'm sorry, Your Honor.

02:57 21 THE COURT: Not to each other.

02:57 22 MR. BURESH: Understood.

02:57 23 I believe there's a door opening when
02:57 24 Dr. Vasylyev said that he was not going to be taking
02:57 25 home much money because he had to pay his lawyers. I

02:57 1 believe that goes through the in limine on contingency
02:57 2 fee arrangements and allows me to ask questions as to
02:57 3 his lawyer arrangement -- his lawyer pay arrangement.
02:57 4 Excuse me.

02:57 5 THE COURT: What exactly did he say?

02:57 6 MR. BURESH: He said of the whatever
02:57 7 money I take home, I'm not going to be able to receive
02:57 8 most of it because much of it will go to the lawyers.

02:57 9 MR. MCCARTY: He said, I think, legal
02:57 10 fees or legal costs, something like that. And there
02:57 11 was absolutely no door opening.

02:57 12 The issue was responsive to the question
02:58 13 of the insinuation that we were just going to get rich,
02:58 14 going to make a bunch of money, his responding to that.
02:58 15 I didn't open a door about fee arrangements or any of
02:58 16 that stuff.

02:58 17 And I also didn't ask the question, hey,
02:58 18 are you paying your lawyers a bunch of money or
02:58 19 anything like that. I just asked: Are you going to be
02:58 20 pocketing all this money?

02:58 21 And he answered: No. There's other
02:58 22 considerations and what I intend to do with the money.

02:58 23 THE COURT: I agree. I'm not going to
02:58 24 allow you to do that.

02:58 25 Are you going to ask him any questions?

02:58 1 MR. BURESH: I am. Thank you,
02:58 2 Your Honor.

02:58 3 (Bench conference concludes.)

02:58 4 RECROSS-EXAMINATION

02:58 5 BY MR. BURESH:

02:58 6 Q. Dr. Vasylyev, you have just answered a few
02:59 7 questions about light trapping, and I believe you said
02:59 8 that light guides trapped light?

02:59 9 A. Yes, sir.

02:59 10 MR. BURESH: Okay. Could we pull up
02:59 11 PDX-2.35?

02:59 12 BY MR. BURESH:

02:59 13 Q. Now, in this slide, Dr. Vasylyev, the dark
02:59 14 blue is a light guide?

02:59 15 A. On the right, yes.

02:59 16 Q. On the right. Okay.

02:59 17 And the LED is pumping light in the edge of
02:59 18 the light guide?

02:59 19 A. That is correct.

02:59 20 Q. And then the light hits deflecting elements
02:59 21 and exits the light guide?

02:59 22 A. Correct.

02:59 23 Q. So when I think of a trap, I think of
02:59 24 something coming in being trapped so it can't get back
02:59 25 out.

02:59 1 Do you have some different understanding of
03:00 2 what a trap is?

03:00 3 A. Yes, sir.

03:00 4 Q. Okay.

03:00 5 A. Do you want me to explain?

03:00 6 Q. Let me ask it this way: You see that door
03:00 7 back there?

03:00 8 A. Yes, sir.

03:00 9 Q. And I'm right here at this podium. Am I
03:00 10 trapped in this room during the time it takes me to
03:00 11 walk from here to the door? Am I trapped during that
03:00 12 time?

03:00 13 A. I don't believe so.

03:00 14 Q. Okay. Your counsel asked you: Did
03:00 15 Mr. Buresh, that's me, ask you anything at all about
03:00 16 the claims of the patents?

03:00 17 And you, I dare say, gleefully said: No. He
03:00 18 did not.

03:00 19 A. Yes, sir.

03:00 20 Q. Now, when you were on your direct, you didn't
03:00 21 talk about the claims of the patent, did you?

03:00 22 A. I don't remember. Probably not.

03:00 23 Q. You don't remember your testimony?

03:01 24 A. Yeah. I mean, it was lengthy one, but I can't
03:01 25 recall.

03:01 1 Q. You don't know whether two hours ago you
03:01 2 talked about the claims or you didn't talk about the
03:01 3 claims?

03:01 4 A. I can't recall.

03:01 5 Q. Hmm. Well, it wouldn't be surprising,
03:01 6 assuming you didn't, because we never heard it, that I
03:01 7 wouldn't ask you questions about something you didn't
03:01 8 testify about. That's not real surprising, is it?

03:01 9 A. I disagree with your characterization.

03:01 10 Q. Now, the claims of the patent, they're the
03:01 11 ones at the end, right? They're the part of the patent
03:01 12 at the very end. The numbered paragraphs?

03:01 13 A. Yes. Typically in the printed form, they
03:01 14 oftentimes appear at the end, yes.

03:01 15 Q. And they're the -- kind of the important
03:01 16 conclusion of the patent, right?

03:01 17 A. I disagree with your characterization.

03:01 18 Q. You don't think --

03:01 19 A. These are not conclusions, these are claims.

20 Q. Okay.

03:01 21 A. It's a different term. I think you should
03:01 22 know.

03:01 23 Q. The claims are important and they're at the
03:02 24 end of the patent, fair?

03:02 25 A. Yes.

03:02 1 Q. Okay. Now, let's say I open up a novel.
03:02 2 Okay? And there is an exciting conclusion in the last
03:02 3 chapter. I mean, it's -- it's really important. The
03:02 4 conclusion is beautiful. But if I don't read the first
03:02 5 15 chapters of the book, I don't really understand that
03:02 6 conclusion in the last chapter, do I?

03:02 7 A. I don't know. I don't see any, you know,
03:02 8 comparison that can be drawn between the -- a novel and
03:02 9 a patent.

03:02 10 Q. Okay.

03:02 11 A. These are just completely different types of
03:02 12 writings and documents.

03:02 13 Q. So you would have this jury believe that they
03:02 14 should just ignore the entirety of the patents, don't
03:02 15 look at those patents, up until the claims. You don't
03:02 16 want them to look at it?

03:02 17 A. This is not what I said. I disagree with your
03:03 18 characterization of my words. The description is
03:03 19 important, but the scope of the patent is defined by
03:03 20 the claims.

03:03 21 Q. I agree. The description is important.

03:03 22 Let's go to the '089 description.

03:03 23 MR. BURESH: Could you pull up for me the
03:03 24 abstract to begin with?

03:03 25 BY MR. BURESH:

03:03 1 Q. Now, your counsel showed you this abstract and
03:03 2 said there's nothing about converting light to
03:03 3 electricity right here in this abstract.

03:03 4 Do you recall that?

03:03 5 A. I'm not sure that that was the exact wording
03:03 6 that he used.

03:03 7 Q. Okay.

03:03 8 MR. BURESH: Let's go to the field of
03:03 9 invention which begins the written description.

03:03 10 BY MR. BURESH:

03:03 11 Q. Field of invention: The present invention
03:04 12 relates to a device and method for harvesting radiant
03:04 13 energy emanated by a distant radiant energy source,
03:04 14 particularly to collecting the sunlight and absorbing
03:04 15 it by a light sensitive material, medium, or device.

03:04 16 Do you see that?

03:04 17 A. Yes, sir.

03:04 18 Q. So if we turn a page, we start seeing your
03:04 19 patent talk about solar collection, right?

03:04 20 A. It does talk about solar collection here.
03:04 21 Yes.

03:04 22 MR. BURESH: Let's go to the '318 patent.
03:04 23 Column 15, please. And if you could zoom in on the
03:04 24 paragraph from Lines 15 through 25.

25 BY MR. BURESH:

03:05 1 Q. Now, we just saw this a minute ago, right?

03:05 2 A. Yes.

03:05 3 Q. And I believe your counsel highlighted
03:05 4 "optical waveguide" in the last -- second-to-last line
03:05 5 there, right?

03:05 6 A. Yes.

03:05 7 Q. And lighting panel, right?

03:05 8 A. Yes, sir.

03:05 9 Q. Now, let's look at the context of this
03:05 10 paragraph because context is important. Just the
03:05 11 paragraph. The optical cover 2 employs an optical
03:05 12 cladding layer 22.

03:05 13 Do you see that?

03:05 14 A. Yes, sir.

03:05 15 Q. Okay. Now, layer -- the next sentence or the
03:05 16 second sentence down: Layer 22 should be made from a
03:05 17 material having a lower refractive index -- and it goes
03:05 18 on from there.

03:05 19 A. I see that.

03:05 20 Q. So we're now talking about a cladding layer,
03:05 21 right?

03:05 22 A. Right. That's in this device.

03:06 23 Q. Okay. Now, go down to "suitable" about
03:06 24 halfway down there: Suitable cladding materials may
03:06 25 include low refractive index monomers, polymers,

03:06 1 fluoropolymers, low-n optical adhesives, thin films,
03:06 2 and other materials that are commonly used for cladding
03:06 3 in optical waveguides, light panels, and photovoltaic
03:06 4 cells.

03:06 5 Do you see that?

03:06 6 A. Yes. I can see that.

03:06 7 Q. So we're just talking here about we could go
03:06 8 look at these other devices to get suitable cladding
03:06 9 materials. That's what it's talking about, right?

03:06 10 A. I'm not sure I would agree with your
03:06 11 characterization what it says.

03:06 12 Q. This is not saying that your invention would
03:06 13 be used -- the '318 patent invention would be used in
03:06 14 the context of a waveguide or a lighting panel. It's
03:06 15 not saying that, is it?

03:06 16 A. I believe it implies by virtue of using this
03:07 17 language and mentioning these devices. Anybody, I
03:07 18 think, in -- you know, skilled in the art in this field
03:07 19 will understand it this way because it suggests that
03:07 20 these are the contacts and applications of the device.

03:07 21 Q. It suggests it'd be a good place to go to find
03:07 22 some cladding materials, right?

03:07 23 A. No. I disagree with your characterization.

03:07 24 Q. All right. MSI and Samsung. You said these
03:07 25 are display companies that have paid to use my

03:07 1 technology, right?

03:07 2 A. Yes.

03:07 3 Q. With a gun to their head, right?

03:07 4 A. Totally disagree.

03:07 5 Q. You sued MSI?

03:07 6 A. That is correct.

03:07 7 Q. You sued Samsung?

03:07 8 A. Yes, sir.

03:07 9 Q. Now, earlier I think you said the law requires
03:08 10 a party like ASUS to enter a licensing agreement.

03:08 11 Do you recall saying something to that effect?

03:08 12 A. If they infringe, yes.

03:08 13 Q. And that's the big if, right?

03:08 14 A. Correct.

03:08 15 Q. If my client doesn't infringe, you would agree
03:08 16 with me that they do not owe you one red cent, right?

03:08 17 A. Yes, sir.

03:06 18 MR. BURESH: Pass the witness,

03:08 19 Your Honor.

03:08 20 MR. MCCARTY: Just a couple of questions,
21 Your Honor.

03:08 22 FURTHER REDIRECT EXAMINATION

03:08 23 BY MR. MCCARTY:

03:08 24 Q. Do you remember when I was asking you if you
03:08 25 make sure that your attorneys and your representatives

03:08 1 treat people respectfully?

03:08 2 A. Yes, sir.

03:08 3 Q. Including in the courtroom?

03:08 4 A. Yes.

03:08 5 Q. You think characterizing this situation with a
03:08 6 Samsung or an MSI as "a gun to your head" is
03:08 7 respectful?

03:08 8 A. Absolutely not.

03:08 9 MR. MCCARTHY: Could you please go to
03:08 10 Slide 2.35?

03:09 11 BY MR. MCCARTY:

03:09 12 Q. Is the light trapped until it hits a
03:09 13 microstructure then to exit out collimated?

03:09 14 A. That is exactly what is happening. It
03:09 15 propagates the index light guide in the trapped state
03:09 16 until it hits one of those microstructures, and then it
03:09 17 continues -- the rest of the light continues
03:09 18 propagating also in the trapped state until it hits one
03:09 19 of the further microstructures along its path.

03:09 20 So the whole purpose of this waveguide is
03:09 21 actually to confine, in other words, trap that light
03:09 22 and prevent it from coming out until it's needed.

03:09 23 Q. Does it have anything to do with whether or
03:09 24 not that door's locked?

03:09 25 A. No.

03:09 1 Q. And when that light is trapped in there until
03:09 2 just the right time it can get out, what does that
03:09 3 allow you to do in terms of the size and the --

03:09 4 A. Yeah. So trapping that light actually is
03:09 5 extremely beneficial for LCD displays because in their
03:10 6 backlights, you can propagate light long distances and
03:10 7 emit light only where it's needed so that you can make
03:10 8 very big large-area displays and not sacrifice any
03:10 9 uniformity or, let's say, to significant degree the
03:10 10 efficiency or brightness.

03:10 11 Q. Is that what we saw with your prototype design
03:10 12 down there?

03:10 13 A. Yes, sir.

03:10 14 Q. Okay.

03:10 15 MR. MCCARTHY: No further questions.

03:10 16 MR. BURESH: Nothing further, Your Honor.

03:10 17 THE COURT: You may step down.

03:10 18 You may call your next witness.

03:10 19 THE WITNESS: Thank you.

03:10 20 MR. REICH: Your Honor, Seth Reich for
03:10 21 SVV, and we call Mr. Tom Credelle.

03:10 22 (The witness was sworn.)

03:10 23 DIRECT EXAMINATION

03:10 24 BY MR. REICH:

03:11 25 Q. Good afternoon, Mr. Credelle.

03:11 1 A. Good afternoon.

03:11 2 Q. Are you an SVV employee?

03:11 3 A. No. I'm not.

03:11 4 Q. Are you what's called an "expert witness"?

03:11 5 A. Yes. That's my role.

03:11 6 Q. What is the role of an expert witness in a
03:11 7 trial?

03:11 8 A. It's to use my experience and knowledge to
03:11 9 understand all the issues regarding these claims and
03:11 10 these infringement that we'll discuss today.

03:12 11 Q. And can you see confidential information of
03:12 12 ASUS' that SVV employees cannot see?

03:12 13 A. Yes. That is correct.

03:12 14 Q. Now, as part of being an expert witness, did
03:12 15 you know Dr. Vasylyev before this case?

03:12 16 A. No. I did not have the fortune to meet him
03:12 17 before this case.

03:12 18 Q. And that helps in your independence?

03:12 19 A. Yes. That certainly makes me independent.

03:12 20 Q. Now, are you being compensated as your role as
03:12 21 an expert witness in this case?

03:12 22 A. Yes. I'm compensated at my normal rate.

03:12 23 Q. And does your compensation have anything to do
03:12 24 with the outcome of this trial?

03:12 25 A. It does not.

03:12 1 Q. Did you have some slides that you prepared to
03:12 2 aid your testimony today?

03:12 3 A. Yes. I did.

03:12 4 Q. Now, before we get too deep into your opinions
03:12 5 in this case, can you tell the jury a little bit about
03:12 6 yourself and your personal background?

03:12 7 A. Sure. I was born and raised in Seattle,
03:12 8 Washington, in the Northwest. I went to school back
03:13 9 East at Drexel and MIT. I'm married to my lovely wife
03:13 10 for now 43 years. We have two sons, age 42 and 39. We
03:13 11 didn't waste any time.

03:13 12 I have two beautiful granddaughters age 5 and
03:13 13 3 who love their grandma and grandpa, and we love them
03:13 14 back. I now live in a small town in Oregon called
03:13 15 Bend. It's a mountain town, very small.

03:13 16 Q. Now, I think you mentioned your schooling.
03:13 17 Where did you go to school?

03:13 18 A. I did get my undergraduate degree at Drexel
03:13 19 University. Field is electrical engineering with an
03:13 20 emphasis in solid-state materials.

03:13 21 Sorry for my voice.

03:13 22 After graduating from Drexel, I was lucky
03:13 23 enough to be awarded a full scholarship to MIT, which
03:13 24 allowed me to go to graduate school. So I did go to
03:14 25 MIT and received my master's degree, also in electrical

03:14 1 engineering, with strong emphasis in the optical
03:14 2 properties of materials.

03:14 3 Q. And where did you go after you finished your
03:14 4 schooling?

03:14 5 A. I got a taste for doing research and
03:14 6 development. And this is in the '70s. There were
03:14 7 quite a few industrial laboratories in the United
03:14 8 States that did R&D focused on products.

03:14 9 One of those was RCA. We were talking earlier
03:14 10 about those large TVs. They invented color TV. I was
03:14 11 hired by the research department to help develop new
03:14 12 products.

03:14 13 Q. And so what did you do while you were at RCA?

03:14 14 A. I used my knowledge about materials to get
03:14 15 involved with several projects. But after a couple of
03:14 16 years, a new project cropped up.

03:14 17 The chairman of RCA said: We have to do
03:14 18 something about these big TVs. We want to make a
03:14 19 hang-on-the-wall television maybe as big as 40 inches.

03:14 20 That was our goal. It seemed like a very
03:15 21 interesting concept. We didn't know exactly how to do
03:15 22 it, but I was really enthused to get involved in
03:15 23 something that would be so impactful to our lives.

03:15 24 Q. Now, how about next, what'd you do at GE?

03:15 25 A. So at RCA we did develop finally some small

03:15 1 working prototypes using LCD technology, what we'd been
03:15 2 talking about today with backlights, although they were
03:15 3 lamps.

03:15 4 RCA was purchased by GE in the mid-'80s, and
03:15 5 GE also had a development program for LCDs, but they
03:15 6 were focused on building displays for fighter jet
03:15 7 cockpits. The fighter jet cockpit is very small, and
03:15 8 the idea of putting a flat panel screen in there was
03:15 9 very attractive to the military.

03:15 10 And we developed prototypes that were
03:15 11 approximately about 5-inches-by-5-inches in size that
03:15 12 were geared for that application.

03:16 13 (Clarification by Reporter.)

03:16 14 BY MR. REICH:

03:16 15 Q. Now, did you receive any recognition for your
03:16 16 work at GE that you were just describing?

03:16 17 A. Yes. As a matter of fact, our team did.
03:16 18 There's a magazine called Popular Science. Maybe some
03:16 19 of you have seen it. It's been around for over
03:16 20 100 years. And it covers topics at a layman's -- from
03:16 21 a layman's point of view about what's going on in
03:16 22 technology.

03:16 23 They did an article on our work at GE.
03:16 24 There's a picture here of the avionics screen. In
03:16 25 fact, if you look in cockpits today, you'll see those

03:16 1 kind of screens in every airplane.

03:16 2 But this was a first. This was the first LCD
03:16 3 with a million pixels, which isn't very big by today's
03:16 4 standards but was quite impressive in 1988.

03:16 5 Q. And so is that your photo by the cockpit and
03:16 6 your name in this Popular Science?

03:16 7 A. Yes. That's a very young picture of
03:17 8 Tom Credelle.

03:17 9 Q. Now, was your technology that you developed at
03:17 10 GE commercialized broad scale?

03:17 11 A. Yes. It was commercialized, and it was
03:17 12 adopted by the U.S. military for fighter jets as well
03:17 13 as other applications in commercial aviation.

03:17 14 Q. Where did you work after your time at GE?

03:17 15 A. So by the time I was at GE, I'd been working
03:17 16 in R&D for about 20 years. And I really had the itch
03:17 17 to get involved with more product development, in
03:17 18 consumer products especially.

03:17 19 And there was a small company in California at
03:17 20 the time called Apple, and Apple wanted to build laptop
03:17 21 computers. It didn't exist until that point. I was
03:17 22 hired to run the group that would engineer flat panels
03:17 23 LCDs into laptop computers, and in that process we had
03:17 24 to work with suppliers. We had to modify the
03:17 25 characteristics of the panel because Apple has very

03:18 1 specific needs. But we did introduce the very first
03:18 2 laptop computers from Apple in around 1992 called the
03:18 3 PowerBook.

03:18 4 Q. And were you in charge of that team that
03:18 5 introduced Apple's very first laptop?

03:18 6 A. Yes. I was.

03:18 7 Q. Now, were you at Apple for another 20 years?

03:18 8 A. No. I wasn't. Apple at that time was -- I
03:18 9 have to say it was kind of drifting. Steve Jobs was
03:18 10 not at the company at that time. And it didn't look
03:18 11 like it had a real vision for the future.

03:18 12 And I had the opportunity to work for some
03:18 13 companies that were doing real product development for
03:18 14 the flat panel display business, which is my love. I'm
03:18 15 a display nerd. So I did leave Apple and went to work
03:18 16 for Honeywell.

03:18 17 Q. Well, since leaving Apple, what have you been
03:18 18 doing in the display industry?

03:18 19 A. The theme has always been displays, but it's
03:19 20 run from electronics to packaging, to software, to
03:19 21 power saving.

03:19 22 For example, at Honeywell we were doing
03:19 23 backlight systems to improve the quality of LCDs in
03:19 24 those days.

03:19 25 Motorola worked on a -- I was director of

03:19 1 product marketing for a new technology that Motorola
03:19 2 was developing for TVs and monitors.

03:19 3 I worked at a company called Clairvoyante,
03:19 4 where we were actually inventing new ways to build
03:19 5 displays that would save power and reduce costs. And
03:19 6 my patents and that technology is probably used in
03:19 7 almost all cell phones today, especially the OLED type.

03:19 8 (Clarification by Reporter.)

03:19 9 BY MR. REICH:

03:19 10 Q. And do you also have experience in
03:19 11 nanotechnology? I know we heard about quantum dots.
03:19 12 But other technologies in the display products?

03:19 13 A. Yes. It's a very hot field, I would say,
03:20 14 nanotechnology. And I had the opportunity to work for
03:20 15 a company called Innova Dynamics. They were
03:20 16 developing -- or did develop what's called "nanowires,"
03:20 17 very, very thin nanoscaled wires that could be embedded
03:20 18 in a plastic film.

03:20 19 And that could be used as conductors for
03:20 20 electricity, and that could be used in touch screens or
03:20 21 in flat panels. And that technology was very similar
03:20 22 to the way quantum dots are made.

03:20 23 My job was to put them into products. How do
03:20 24 we use it? How do we convince the manufacturers that
03:20 25 this is good technology? And we did do that.

03:20 1 Q. During the course of your work in the display
03:20 2 industry over the last 40 years, did you get any
03:20 3 patents where you yourself were the inventor?

03:20 4 A. Yes. I did. I'm proud to say that I
03:20 5 received -- I think it's 83 U.S. patents. And these
03:20 6 patents have -- wasn't only when I was in R&D but kind
03:20 7 of span my career.

03:20 8 I'm a problem solver, and often when you solve
03:21 9 a problem, you've got an idea that's novel. And you
03:21 10 can file for a patent and you can get awarded a patent.

03:21 11 But they do span technologies from LCDs to
03:21 12 display fabrication to electronics, software to drive
03:21 13 pixels better, that kind of area.

03:21 14 Q. And what role do patents play in your
03:21 15 experience in the industry?

03:21 16 A. When I joined RCA, I knew about patents
03:21 17 certainly, but I really didn't appreciate the
03:21 18 importance that they were to even large companies.

03:21 19 RCA has a lot of patents. I allowed them to
03:21 20 build products ahead of their competition, and
03:21 21 eventually when they licensed that patents -- those
03:21 22 patents, they could generate some revenue for the
03:21 23 company.

03:21 24 For small companies, it was probably even more
03:21 25 important. Because when you're a small company, you

03:21 1 don't have the resources always to protect your ideas
03:21 2 against competition. So a patent allows you to do
03:21 3 that.

03:22 4 So for example, at the company Clairvoyante, I
03:22 5 probably have 20 or 30 patents that we generated
03:22 6 specifically so we could control these new ideas.

03:22 7 Q. Have you been previously qualified as an
03:22 8 expert witness in a patent case?

03:22 9 A. Yes. I have.

03:22 10 MR. REICH: Your Honor, the plaintiff
03:22 11 offers Mr. Tom Credelle as an expert in LCD displays,
03:22 12 light optics, and nanotechnology in LCD displays.

03:22 13 MR. BURESH: No objection.

03:22 14 THE COURT: He'll be admitted as an
03:22 15 expert.

03:22 16 BY MR. REICH:

03:22 17 Q. Mr. Credelle, are you a lawyer?

03:22 18 A. I am not.

03:22 19 Q. So how is it that you understand the patents
03:22 20 in this case?

03:22 21 A. Actually, patents are -- may be written, but
03:22 22 they are actually written for engineers.

03:22 23 THE COURT: Doctor, Doctor. Sorry. I
03:22 24 should have -- I just think now would be a good time to
03:22 25 break before he gets started.

03:22 1 So ladies and gentleman of the jury, we
03:22 2 are going to take our afternoon recess, 10 or
03:22 3 15 minutes. Please remember my instructions not to
03:22 4 discuss the case.

03:23 5 THE BAILIFF: All rise.

03:23 6 (Jury exited the courtroom.)

03:23 7 THE COURT: You may be seated.

03:23 8 Let me make an observation.

03:23 9 You may be seated.

03:23 10 Occasionally I worry or wonder if my
03:23 11 demeanor, which I'd like to think is mild mannered or
03:23 12 whatever word you want to use, is misunderstood by
03:23 13 lawyers that I don't realize that I'm a federal judge
03:23 14 in the way you all act with each other, in the way you
03:23 15 act with me.

03:24 16 Now, I've done this six years now.
03:24 17 Kristie forgot last -- last week was my six-year
03:24 18 anniversary. She forgot.

03:24 19 But there are really only a handful of
03:24 20 tools I have to work with. There are judges who give
03:24 21 people more time or less time.

03:24 22 Another way of dealing with issues is by
03:24 23 dealing with them discreetly or not discreetly in front
03:24 24 of the jury.

03:24 25 So I'm not sure what I'm -- how I'm going

03:24 1 to deal with if I have any more issues with the fact
03:24 2 that you guys can't get along. That's -- you know,
03:24 3 that's up to you.

03:24 4 But I'm letting you know now that the
03:24 5 next time I have to deal with the fact that you all
03:25 6 can't play nice with each other, I'm offended by it
03:25 7 because there are -- I won't say who, but I think we
03:25 8 all know there were several.

03:25 9 I will say Judge Sparks, who's no
03:25 10 longer -- I can't -- it wasn't always great when we
03:25 11 were getting along. But I would not have not gotten
03:25 12 along in front of him. And so if you all want to see
03:25 13 my best imitation of Sam Sparks, I was a magistrate of
03:25 14 his. I was in front of him a lot. And I can go
03:25 15 toe-to-toe with Sam Sparks if that's what I have to do.

03:25 16 So I'm going to assume that me
03:25 17 admonishing you is enough. But I'm not going to -- I'm
03:25 18 not going to deal with this with you all again.

03:26 19 So we'll be back in 10 or 15 minutes.

03:26 20 (Recess taken.)

03:46 21 THE BAILIFF: All rise.

03:46 22 THE COURT: Please remain standing for
03:46 23 the jury.

03:46 24 (Jury entered the courtroom.)

03:46 25 THE COURT: Thank you. You may be

03:47 1 seated.

03:47 2 Counsel, you may continue, please.

03:47 3 BY MR. REICH:

03:47 4 Q. Mr. Credelle, where we left off, since you're
03:47 5 not a lawyer, how is it that you understand the patents
03:47 6 in this case?

03:47 7 A. As I was saying before the break, patents are
03:47 8 written for technical people, may be written by
03:47 9 lawyers, but the purpose of a patent is to be able to
03:47 10 explain the invention to a technical person so
03:47 11 technical people can read them and understand them.

03:47 12 Q. What technical background does a person need
03:47 13 to understand the SVV patents in this case?

03:48 14 A. In this particular case, a person of skill in
03:48 15 the art would have a bachelor's degree in electrical
03:48 16 engineering, physics, or optics, and at least three
03:48 17 years' experience working in the field of optical
03:48 18 devices or light sources using LCD backlights or
03:48 19 lighting, and/or a general -- a science degree with
03:48 20 five years of experience.

03:48 21 Q. Now, if this level of skill in the art is
03:48 22 required to understand the patents in this case, how is
03:48 23 someone like me or the jury supposed to understand the
03:48 24 issues that you're presenting?

03:48 25 A. Well, that's part of my job this afternoon is

03:48 1 to try to explain the technology to make it
03:48 2 understandable so you can really appreciate how the
03:48 3 claims apply.

03:48 4 Q. All right. Do you have a roadmap of the
03:48 5 issues that you need to address today?

03:48 6 A. Yes.

03:48 7 Q. What are they?

03:48 8 A. Really they break into four categories: The
03:49 9 patents-in-suit, the four patents; the ASUS monitors;
03:49 10 my infringement analysis, which will be most of my
03:49 11 testimony; and some comments about technical value for
03:49 12 damages.

03:49 13 Q. Before we dive into all of that, can you give
03:49 14 us and the jury a brief summary of your conclusions?

03:49 15 A. Yes. My conclusions are that ASUS infringes
03:49 16 Claims 1 and 21 of the '342 patent; ASUS infringes
03:49 17 Claims 1 and 7 of the '562 patent; Claims 19 of the
03:49 18 '089 patent; and finally, Claim 3 of the '318 patent.

03:49 19 Q. How did you approach your investigation in
03:49 20 this case?

03:49 21 A. I looked at a lot of different material and
03:49 22 performed a lot of tasks.

03:49 23 So starting with an understanding of the
03:49 24 patents-in-suit, teardowns of ASUS products. We heard
03:49 25 something about teardowns this morning. An

03:49 1 investigation of any documents from ASUS that were
03:50 2 confidential as well as public data, material that
03:50 3 could be found on the Web, for example. And responses
03:50 4 from ASUS' personnel, testimony from their experts, all
03:50 5 of this material was used to form my opinions.

03:50 6 Q. And did you prepare a report of your opinions
03:50 7 in this case?

03:50 8 A. I did.

03:50 9 Q. And how long about was that report?

03:50 10 A. With all the exhibits, it was several thousand
03:50 11 pages.

03:50 12 Q. Can we start with the patents-in-suit?

03:50 13 A. Sure.

03:50 14 Q. What are you showing on the screen here to the
03:50 15 jury?

03:50 16 A. These are the four patents-in-suit. They're
03:50 17 in your binder. JTX-1, 4 -- I'm sorry. 1, 2, 3, and
03:50 18 4, I believe. I'll refer to these patents by the last
03:50 19 three digits as I've already done -- as has been done
03:50 20 this morning.

03:50 21 So these are the patents that we'll be
03:50 22 discussing.

03:50 23 Q. And were all four patents part of your
03:50 24 investigation?

03:50 25 A. They were.

03:50 1 Q. Can you explain whether these patents are
03:51 2 related in some way?

03:51 3 A. There actually is a relationship. And I've
03:51 4 indicated that by the color coding.

03:51 5 The first three patents stem from a father
03:51 6 patent, if you will, the '007. They're continuations
03:51 7 of that patent with new claims. Sometimes they share
03:51 8 some of the same specifications.

03:51 9 Q. Now, can we go back, you know, the jury heard
03:51 10 last Thursday the Court's patent video, and can you
03:51 11 walk us through one of these patents where we hit those
03:51 12 three main parts that the Court's video talks about?

03:51 13 A. Sure.

03:51 14 Q. Let's start with the '342 patent and the
03:51 15 information page. What are you showing here?

03:51 16 A. So I'm showing the title of the patent, the
03:51 17 inventor, the date of the patent, the date it was
03:51 18 issued, of course the patent number, and some data
03:51 19 relating to this concept of a family of patents.

03:51 20 This particular patent, the '342, stems from a
03:52 21 patent '007, and that '007 has a provisional
03:52 22 application that was filed on April 21st, 2009.

03:52 23 Q. Now, what is a provisional application?

03:52 24 A. A provisional application is something an
03:52 25 inventor can do to kind of hold its place in line at

03:52 1 the Patent Office. It's submitted. It describes the
03:52 2 invention, but it's kind of a rough -- a rough draft.
03:52 3 It can still be -- some new figures could be added, but
03:52 4 it basically is when the clock starts of your invention
03:52 5 and then it becomes a full patent.

03:52 6 Q. Why is that priority date of April 21st, 2009,
03:52 7 significant?

03:52 8 A. It's significant because that is the date the
03:52 9 invention was made. That's what the law says. So if
03:52 10 you try to use this patent anytime after 2009, you
03:53 11 can -- you can be charged with infringement even though
03:53 12 the patent didn't issue until 2018.

03:53 13 Q. And is that when the inventor discloses all of
03:53 14 their information to the public, that constitutional
03:53 15 bargain that we heard about in opening?

03:53 16 A. Yes. That's correct.

03:53 17 Q. Now, in this case is ASUS challenging the
03:53 18 validity or the fact that SVV was the first company and
03:53 19 Dr. Vasylyev the first person to invent the technology
03:53 20 that's claimed in these patents?

03:53 21 A. They're not.

03:53 22 Q. Moving on to the second main part of the '342
03:53 23 patent, the specification, can you describe what's
03:53 24 going on here in the specification?

03:53 25 A. Specification usually starts with a

03:53 1 description of the background of the invention, then
03:53 2 there's an abstract and some other details I'll cover.
03:53 3 But, for example, this is an optical reflecting device,
03:53 4 an apparatus for collecting or distributing energy.

03:54 5 The abstract describes that it's a planar
03:54 6 waveguide and a collimating array with deflector
03:54 7 elements of some of the key parts of what will be
03:54 8 described in the patent.

03:54 9 And another excerpt from the specification
03:54 10 states that there are collimating lenses that are --
03:54 11 that are lenticular lenses. That's what it describes,
03:54 12 among other things.

03:54 13 Q. Now, moving on to the final part or the third
03:54 14 part of the patent that was described in the Court's
03:54 15 video, the claims, what are you showing here?

03:54 16 A. Yes. The claims certainly are -- I would
03:54 17 consider the most important part of a patent, as this
03:54 18 outlines what is claimed. Claim 1 is called an
03:54 19 apparatus claim. There's two types. There's method
03:54 20 claims or apparatus. So this is a device as opposed to
03:54 21 how to build something.

03:54 22 Q. And I think it's worth taking a step back. We
03:55 23 heard a lot about titles of patents.

03:55 24 Do you recall that?

03:55 25 A. Yes.

03:55 1 Q. We heard a lot about specific figures and
03:55 2 lines of specification.

03:55 3 Do you recall that?

03:55 4 A. Yes.

03:55 5 Q. What actually matters for purposes of
03:55 6 determining whether a patent is infringed?

03:55 7 A. Only the claims.

03:55 8 Q. And is the title and the background -- what's
03:55 9 the point of that?

03:55 10 A. It's instructive. It gives examples, but it's
03:55 11 not -- it's not what is claimed necessarily. So you
03:55 12 really have to look at the claims. They can be
03:55 13 slightly different than the title for sure.

03:55 14 Q. And is the Court going to instruct the jury on
03:55 15 the law that the claims are what matters?

03:55 16 A. I believe so.

03:55 17 Q. Now, just looking at one of those examples,
03:55 18 though, that you talked about, can we compare one of
03:55 19 these claims to an example in the '342 patent?

03:55 20 A. Sure.

03:55 21 Q. What are you showing here?

03:55 22 A. This is Figure 26 from the '342 patent. You
03:56 23 might have seen this earlier. I've color-coded the
03:56 24 figure and highlighted some text in the claim.

03:56 25 For example, the planar waveguide, it's also

03:56 1 called a "light guide," I'll be showing you one of
03:56 2 those later, is colored in yellow.

03:56 3 The LEDs are mounted on the edge of that light
03:56 4 guide colored in blue.

03:56 5 There's an input edge that's a requirement of
03:56 6 this patent. It's highlighted in purple.

03:56 7 And finally, there are deflecting elements so
03:56 8 light that is trapped in the light guide will come out
03:56 9 if it hits one of those protrusions, if you will, or
03:56 10 those little notches, and once the light comes out, it
03:56 11 goes through a plurality, that means more than one,
03:56 12 cylindrical lens.

03:56 13 Q. And again, just so we're clear and that
03:56 14 there's no confusion by anyone, is this figure a
03:56 15 limitation on the invention of SVV's patents?

03:57 16 A. Absolutely not.

03:57 17 Q. It's just an example?

03:57 18 A. Just an example.

03:57 19 Q. Now, you've only highlighted some of this
03:57 20 claim. Are there additional elements that we're going
03:57 21 to walk through when we have to address ASUS' products?

03:57 22 A. Yes. Of course. My job is to look at all the
03:57 23 claim elements, all the words, and interpret them and
03:57 24 show whether or not they -- features are in the ASUS
03:57 25 accused products.

03:57 1 Q. And I know we did one of the '007 patent, but
03:57 2 are there additional limitations and differences in the
03:57 3 other two members of this family that we'll also
03:57 4 address later?

03:57 5 A. They are related. But they have a new set of
03:57 6 claims claiming different aspects of the invention
03:57 7 which is allowed by the patent system.

03:57 8 Q. And returning to this set of family members,
03:57 9 you also have the '791 patent?

03:57 10 A. Yes.

03:57 11 Q. Can we also talk about that?

03:57 12 A. Yes. In the same way.

03:57 13 Q. What are you showing on this?

03:58 14 A. Again, from the front page there is the -- the
03:58 15 title -- the title of the patent, the inventor, the
03:58 16 dates, as I mentioned. And in this case this
03:58 17 particular patent is a continuation or a division
03:58 18 stemming from the '791 patent that I've highlighted in
03:58 19 yellow. And that '791 comes from a provisional
03:58 20 application filed August 21st -- I'm sorry, July 13th,
03:58 21 2010.

03:58 22 Q. Did you say -- yes. The provisional
03:58 23 application was filed on July.

03:58 24 A. Yeah, July and August. Yes. Two different
03:58 25 provisionals.

03:58 1 Q. Now, again, to be clear, even with this
03:58 2 patent, is ASUS in this case challenging the validity
03:58 3 or the fact that SVV and Dr. Vasylyev was the first
03:58 4 company and person to invent the inventions that are
03:59 5 claimed in the '089 patent?

03:59 6 A. They are not disputing that fact.

03:59 7 Q. Now, this is the patent that has that title
03:59 8 that says light trapping.

03:59 9 Do you recall?

03:59 10 A. Yes. It's in the title.

03:59 11 Q. Is the title, the fact that it says light
03:59 12 trapping here, a limitation on the claim?

03:59 13 A. Absolutely not.

03:59 14 Q. What is the purpose of the title?

03:59 15 A. The title gives some -- usually an inventor,
03:59 16 and I put myself in this category, you try to come up
03:59 17 with a title that's reasonably descriptive of the
03:59 18 invention but it is not a limiting to the invention.

03:59 19 So you have a concept of light converting and
03:59 20 light trapping and light absorbing, those are parts of
03:59 21 the claim -- of the patent, but it isn't meant to say
03:59 22 they have to be -- it's not what determines the claim,
03:59 23 the interpretation.

03:59 24 Q. And do many patents have multiple embodiments
03:59 25 or examples in them?

03:59 1 A. Yeah. It is very common, and certainly with
04:00 2 these patents, there are multiple examples which are
04:00 3 sometimes called "embodiments" that describe different
04:00 4 ways to use the invention.

04:00 5 Q. So you can have one patent that has some
04:00 6 examples for solar and some examples that would be
04:00 7 useful in displays?

04:00 8 A. That's correct.

04:00 9 Q. Now, I want to look at the specification of
04:00 10 the '089.

04:00 11 What are you showing here?

04:00 12 A. The '089 adds a feature that we've heard a
04:00 13 little bit about this morning, a photoresponsive layer.
04:00 14 That's a layer that reacts to light. And it includes
04:00 15 in this case quantum dots. We've heard a bit about
04:00 16 that. And there's also a optical system that allows
04:00 17 the light to recirculate and make the display brighter
04:00 18 by having multiple passages through the quantum dot.

04:00 19 Q. And can you show us one of the claims?

04:00 20 A. Yes.

04:00 21 Q. What are you showing here with respect to the
04:00 22 Claim 14 of the '089?

04:00 23 A. Claim 14 is one of the asserted claims, and
04:01 24 I've highlighted the planar photoresponsive layer and
04:01 25 quantum dots.

04:01 1 Q. And are we going to go through all the
04:01 2 relevant claim limitations for the '089 patent?

04:01 3 A. Once again, we will go through every sentence.

04:01 4 Q. Mr. Credelle, are we ready to turn to the
04:01 5 accused products in this case, ASUS' monitors?

04:01 6 A. Yes.

04:01 7 Q. What ASUS products are accused of infringement
04:01 8 in this case?

04:01 9 A. There's a long list of monitors. I think the
04:01 10 list is around 90 different monitors are accused. And
04:01 11 we have, I think, an example of one of them. This is
04:01 12 the ROG Swift PG32UQ. It's a gaming monitor. And it
04:01 13 is actually what I'm going to show you in a few moments
04:01 14 about what's inside this monitor. But this is an
04:01 15 example of one of the accused products.

04:01 16 Q. And is this the one that we saw the big, big
04:02 17 box that Mr. Caldwell showed in opening?

04:02 18 A. Yes, that's correct.

04:02 19 Q. Now, to be clear, do all of ASUS' products,
04:02 20 all their monitors infringe SVV's patents?

04:02 21 A. No. As a matter of fact, they do not.

04:02 22 Q. And so how do you go about determining which
04:02 23 monitors infringe and which don't?

04:02 24 A. You basically have to take them apart.
04:02 25 This -- these are physical characteristics of the

04:02 1 lighting system in a monitor so we can look at the
04:02 2 details either under a microscope or with our human eye
04:02 3 and determine whether there is a feature that is
04:02 4 infringing.

04:02 5 Q. Can you walk us through a demonstration to
04:02 6 show the jury what one of these teardowns would look
04:02 7 like?

04:02 8 A. Yes. I'd be happy to.

04:02 9 MR. REICH: Your Honor, may Mr. Credelle
04:02 10 come down?

04:02 11 THE COURT: Sure.

04:03 12 THE WITNESS: Okay. Am I live? It will
04:03 13 make it much easier to demonstrate like --

04:03 14 BY MR. REICH:

04:03 15 Q. All right. What do you have here?

04:03 16 A. What I have here is that ROG Swift.

04:03 17 (Off-the-record discussion.)

04:03 18 THE WITNESS: That monitor I just
04:03 19 described is a diagonal gaming monitor.

04:04 20 (Clarification by Reporter.)

04:04 21 THE WITNESS: Okay. I'll try to be
04:04 22 clear. If you can't hear me, please let me know.

04:04 23 So I've taken apart one of these
04:04 24 monitors, and I've kind of put it back together. I
04:04 25 want to show you sort of step-by-step what is in this

04:04 1 backlighting system.

04:04 2 This is -- we're looking at the back case
04:04 3 now, but this is a typical monitor. If you looked at
04:04 4 the back, it has the wires going in just like any
04:04 5 monitor.

04:04 6 BY MR. REICH:

04:04 7 Q. And now this doesn't quite look like a monitor
04:04 8 we would normally see.

04:04 9 Do you have some slides to help us kind of
04:04 10 piece it all together?

04:04 11 A. Yes. The slides will help hopefully orient
04:05 12 yourself where we are.

04:05 13 Q. All right. Now, the monitor on our slide
04:05 14 looks like a normal monitor and this doesn't.

04:05 15 What's going on?

04:05 16 A. I'm going to carefully hold up this very thin
04:05 17 piece of glass. This is the LCD. This is what makes
04:05 18 the picture. We heard a little bit about that this
04:05 19 morning.

04:05 20 You can see some electronics in the bottom
04:05 21 that's plugged into a video card. This is a 4K
04:05 22 resolution. There are lots of pixels. Again, they act
04:05 23 like little shutters, but they don't create any light.
04:05 24 So for this to work, we need to have a light source, a
04:05 25 bright light source behind it to make the picture we

04:05 1 see.

04:05 2 Q. And what is this whole component that we're
04:05 3 looking at called?

04:05 4 A. If these are together, it's referred to as an
04:05 5 LCD module, liquid crystal display module.

04:05 6 Q. And do the LCD modules have any kind of
04:05 7 identification information on them?

04:05 8 A. Yes. On the back of the LCD module, there's a
04:06 9 label that tells you something about the module itself.
10 I'm not talking about the monitor but this LCD module.
11 In this case it's made by a company called
04:06 12 AU Optronics.

04:06 13 Q. And where is this particular model made?

04:06 14 A. This is made in China.

04:06 15 Q. Now, does ASUSTek make any of the LCD modules
04:06 16 at issue in this case?

04:06 17 A. They do not.

04:06 18 Q. Now, as we reconstruct your deconstructed
04:06 19 monitor, what's the first set of components we need to
04:06 20 look at?

04:06 21 A. So what we have here is the first set of
04:06 22 components. There's a row of LEDs on the bottom. It's
04:06 23 maybe a little hard to see, but you'll see them when
04:06 24 they're turned on, and a very bright white reflector.
04:06 25 That's a very high-efficiency reflector, this white

04:06 1 sheet of plastic. And that plastic is also -- not like
04:06 2 a mirror, it diffuses the light so light can go in
04:06 3 different directions.

04:07 4 Q. Can I turn this on?

04:07 5 A. Let's try.

6 Q. One second.

04:07 7 A. It's bright.

04:07 8 Q. It'll flicker?

04:07 9 A. It'll flicker. It should come on. Yeah.

04:07 10 Okay. So try not to look directly at the LEDs. They
04:07 11 are quite bright. They're going to generate all the
04:07 12 light we need.

13 (Clarification by Reporter.)

04:07 14 THE WITNESS: They're going to generate
04:07 15 all the light we need for this entire back surface.

04:07 16 BY MR. REICH:

04:07 17 Q. And this is pretty bright, is it not?

04:07 18 A. Yes. It's pretty bright and it's blue. We
04:07 19 kind of think you need white light behind an LCD, which
04:07 20 is generally the case. But this is a display. It uses
04:07 21 some extra components that uses a blue light.

04:07 22 Q. You know, Mr. Buresh said earlier it's going
04:07 23 to blind your eyes. I think this is that level, do you
04:07 24 think?

04:07 25 A. Yes. I'm trying not to look at it directly,

04:08 1 and I advise you not to as well.

04:08 2 Q. And so what's the next component that we need
04:08 3 to look at?

04:08 4 A. The next component is what's called the "light
04:08 5 guide." I talked about that briefly.

04:08 6 Q. Now, can you show the jury the light guide
04:08 7 plate?

04:08 8 A. So this is the light guide plate. And you can
04:08 9 actually see through it. It's very clear plastic. The
04:08 10 reason it looks a little bit odd is there are lenses on
04:08 11 the front side. It's microstructures on the backside.

04:08 12 But if you look down the -- down along the
04:08 13 edge, you see it's very clear plastic. The idea is you
04:08 14 don't want any light to get lost. You want to get it
04:08 15 to where it's supposed to be.

04:08 16 Q. And is there anything else important on the
04:08 17 edges?

04:08 18 A. Yes. There's actually reflective tape on
04:08 19 three of the edges. And the idea is you don't want
04:08 20 light that goes to the top or the sides to be wasted.
04:08 21 You want to reflect that back into this -- this light
04:08 22 guide.

04:08 23 Q. Can you show the jury what happens when the
04:08 24 light guide plate is added to the system?

04:08 25 A. Okay. So now the LEDs are not so bright

04:09 1 because the light is being channeled into this light
04:09 2 guide. All that light is going up towards the top, and
04:09 3 some of it bounces back. And I'll show you some
04:09 4 animations later about how that works.

04:09 5 But there are little deflecting elements
04:09 6 scattered on this sheet, millions of them or hundreds
04:09 7 of thousands, so that the light can come out uniformly
04:09 8 everywhere, from the bottom to the top, to the right,
04:09 9 to the left. And you can see that there's not a lot of
04:09 10 wasted light coming out the edges.

04:09 11 Q. And can we show the jury what those
04:09 12 microscopic features look like?

04:09 13 A. Yeah. So on your screen, you should see a
04:09 14 view of the top of this light guide system which has
04:09 15 these lenticular or linear lenses. You can see a cross
04:10 16 section, I think, in the -- you can see a top view in
04:10 17 the picture.

04:10 18 On the backside are small microcavities that
04:10 19 are going to be used to get that light out of the light
04:10 20 guide.

04:10 21 Q. Now, what's the next layer that you want to
04:10 22 show the jury in this reconstruction?

04:10 23 A. So the next layer is what's called a "quantum
04:10 24 dot layer."

04:10 25 Q. And first, I just want to stop you there.

04:10 1 What is a quantum dot? We've heard about it a
04:10 2 little bit. Can you explain it?

04:10 3 A. Yes. So a quantum dot is a semiconductor
04:10 4 particle, a nanoparticle. It's very small. And when
04:10 5 energized with photons, with light, it generates an
04:10 6 electron that can then decay back and create a photon,
04:10 7 which is another color light by its very interesting
04:10 8 design.

04:10 9 But based on the size of these dots, you get
04:10 10 different colors. This is a very, like, unique device.
04:10 11 And I think we saw them this morning but --

04:11 12 Q. There you go.

04:11 13 A. So a blue light. When you shine blue light on
04:11 14 these quantum dots, now the blue light is converted to
04:11 15 red. And these are red quantum -- these are red
04:11 16 quantum dots based on their size.

04:11 17 And if they're a little bit smaller, they can
04:11 18 be green. And you can actually design the color you
04:11 19 want. But for a display, as you heard earlier, we want
04:11 20 red, green, and blue lighting ultimately.

04:11 21 Q. And you said something just now that was
04:11 22 really interesting that I want to unpack a little bit.
04:11 23 Okay? Is that okay?

04:11 24 A. Yes.

04:11 25 Q. You talked about and we've heard about the

04:11 1 idea of quantum dots converting energy.

04:11 2 Do you recall that?

04:11 3 A. Yes.

04:11 4 Q. How does it work? Now we're going to have to
04:11 5 step back at the atomic physics level.

04:11 6 How does quantum dots -- how do quantum dots
04:12 7 convert light to energy?

04:12 8 A. So they are a unique semiconductor particle,
04:12 9 but like all semiconductors, if you excite electrons
04:12 10 inside those semiconductors by energizing them, by
04:12 11 putting like, for example, light on those, you'll have
04:12 12 energized electrons.

04:12 13 And as those decay back to their normal state,
04:12 14 they emit light. This is a way many photo materials
04:12 15 work. But it's unique that they emit a certain
04:12 16 wavelength light depending on their size.

04:12 17 Q. So do I have it right, light --

04:12 18 THE COURT: Do you need him to be there
04:12 19 still?

04:12 20 MR. REICH: Yes. We're going to do the
04:12 21 rest, if that's okay, Your Honor.

04:12 22 THE COURT: I'm having a hard time
04:12 23 hearing him, but that's okay.

04:12 24 MR. REICH: Just try to talk a little bit
04:12 25 more in the mic. Maybe bring it up.

04:12 1 THE WITNESS: Okay. I think I can do it.

04:12 2 BY MR. REICH:

04:12 3 Q. And so as I understand it, you have light
04:12 4 converted to energy converted to another color of
04:12 5 light; is that right?

04:12 6 A. Right.

04:12 7 Q. Okay. Can you show the jury the quantum dot
04:13 8 film and where it goes in the monitor?

04:13 9 A. So this is the quantum dot film. You can see
04:13 10 it's a little bit transparent. But it has billions of
04:13 11 quantum dots embedded in this film scattered uniformly
04:13 12 across the whole film.

04:13 13 Q. Will you place it in the monitor?

04:13 14 A. I'm going to place this slightly offset so as
04:13 15 I add these films, you can kind of see the improvement.
04:13 16 I think right away you see the light is no longer blue,
04:13 17 but it's not red and green. The reason is that the
04:13 18 quantum dots are so small, you really wouldn't see an
04:13 19 individual dot, but you see the accumulated effects.

04:13 20 If you have blue light with a little bit of
04:14 21 red and a little bit of green, you got a whitish color.
04:14 22 The goal is to have pure white. It's not quite there
04:14 23 yet.

04:14 24 Q. Now, what happens if we cut into this layer?
04:14 25 What would we see?

04:14 1 A. We do a cross-sectional cut, which we've done
04:14 2 as shown on the screen. There is a quantum dot layer
04:14 3 surrounded by some protective films. Inside that
04:14 4 grayish layer are the quantum dots. They are so small
04:14 5 that they don't even show up in this high-powered
04:14 6 microscope. You need a super high-powered microscope
04:14 7 to see them.

04:14 8 Q. How small are we talking?

04:14 9 A. We're talking 5 to 7 nanometers. Maybe 10,000
04:14 10 quantum dots equals one human hair. We're using that
04:14 11 as a reference point, but it's 5 to 7 nanometers, which
04:14 12 is a billionth of a meter.

04:14 13 Q. And can you show us how that works?

04:14 14 A. Yes. So on your screen I've indicated blue
04:14 15 light coming into this film, and I've expanded the size
04:15 16 of those dots showing two types of dots, green ones and
04:15 17 red ones. When the blue photon or light ray hits the
04:15 18 quantum dot, you'll generate a little bit of red light
04:15 19 or a little bit of green light. Coming out the front
04:15 20 is blue, red, and green. Not quite balanced yet for
04:15 21 white, but it's one pass through this film.

04:15 22 Q. What's the next layer in our teardown?

04:15 23 A. It's a -- the next layer is just a diffuser to
04:15 24 help smooth out the light. We'll put that on next.

04:15 25 That's just -- that helps control where the

04:15 1 light goes and make it a little bit more uniform.

04:15 2 Q. What's next?

04:15 3 A. What's next is something that we call an
04:15 4 optical film stack because it is a stack of more than
04:15 5 one layer. And the purpose of that, I'll describe.

04:16 6 Q. Can you show the jury the optical film stack?

04:16 7 A. Yeah. I'll try to do that first. So this is
04:16 8 an optical film stack. It's -- obviously it has to be
04:16 9 transparent because the light has to come through it.
04:16 10 But it has some very almost funhouse mirror effects
04:16 11 based on its design.

04:16 12 And I'm going to put this in front of the --
04:16 13 next one down.

04:16 14 Q. Please do.

04:16 15 A. So I think now you can see that it's brighter
04:16 16 and whiter.

04:16 17 Q. Why is that?

04:16 18 A. And that is because there's some light
04:16 19 recirculating, there's some light trapping going on in
04:16 20 this structure. The light that is coming forward to
04:16 21 this film can reflect backwards towards that back
04:16 22 reflector, and when that happens, those blue photons
04:16 23 can have a better chance or another chance to hit a
04:17 24 quantum dot. The idea is that happens until the light
04:17 25 finally comes out in sort of the right collimation, the

04:17 1 right angular spread, to be used in a monitor.

04:17 2 Q. If we cut into this optical film stack, what
04:17 3 do we see?

04:17 4 A. So what we see are these prismatic structures
04:17 5 which are sometimes called "brightness enhancement
04:17 6 films," but they are structures that allow light to go
04:17 7 backwards by this concept of total internal reflection
04:17 8 that we heard about this morning and I'll talk more
04:17 9 about in a few minutes.

04:17 10 Q. And what are the black triangles in this
04:17 11 image?

04:17 12 A. In this particular image, the black part is
04:17 13 air. So we have plastic and we have air. And plastic
04:17 14 has a higher index of refraction, so we're going to get
04:17 15 this total internal reflection that Dr. Vasylyev showed
04:17 16 this morning.

04:17 17 Q. That's the whole speed of light changing
04:17 18 thing?

04:17 19 A. Yeah, that's right. The speed of light
04:17 20 changes and the angles change, and I'll show some
04:18 21 graphics of that in a few moments.

04:18 22 Q. What's the next layer?

04:18 23 A. The final layer before we get to the LCD is
04:18 24 another diffuser. Again, diffusers are used mostly to
04:18 25 kind of smooth out the light distribution, but what

04:18 1 we've achieved here with the optics and the light guide
04:18 2 plate that I described with those lenses and those dots
04:18 3 and these layers is a very uniform emission of light
04:18 4 that now when you put the LCD on top, you will get a
04:18 5 picture.

04:18 6 Q. Now, in opening I believe I heard Mr. Buresh,
04:18 7 ASUS' counsel, say something about what do light films
04:18 8 have to do with this case? I think he was talking
04:18 9 about Dr. Vasylyev's light films, but did you catch
04:19 10 that?

04:19 11 A. Yes.

04:19 12 Q. Does light work the same way whether it's in
04:19 13 Dr. Vasylyev's light guide film or these light guide
04:19 14 films?

04:19 15 A. Yes. The operation is the same. Light reacts
04:19 16 to lenses or surfaces within these structures in
04:19 17 exactly the same way, whether it's in a lighting system
04:19 18 for illumination, like Dr. Vasylyev was illustrating,
04:19 19 but -- by the way, it's almost exactly like this light
04:19 20 guide plate that I showed you. It has the same
04:19 21 features.

04:19 22 This has additional light films to manage the
04:19 23 light, but the goal of this system and the goal of this
04:19 24 invention really is to manage where that light goes, to
04:19 25 get it in the right place to create a bright, efficient

04:19 1 image in a very thin package.

04:19 2 Q. And so this case is all about light films; is
04:19 3 that fair?

04:19 4 A. It's all about light films.

04:19 5 Q. Now, we've almost got a reconstructed monitor.
04:19 6 What's the last piece?

04:19 7 A. Yeah. If I was putting this together, I would
04:20 8 put this on top. I would plug in the circuit board.

04:20 9 I was afraid that was going to happen.

04:20 10 And then it would -- I won't do that today.

04:20 11 MR. REICH: Your Honor, may we publish --
04:20 12 we have another set of these -- to the jury real quick
04:20 13 so that they can see these?

14 THE COURT: You may.

04:20 15 THE WITNESS: So the first thing I'll
04:20 16 pass around is the light guide plate. The entrance
04:20 17 edge is here, and if you kind of run your fingernails
04:21 18 across the top, you can kind of feel the lenticular --
04:21 19 it's kind of like those postcards for 3D that you have
04:21 20 those little ridges. And the back has structure that
04:21 21 you can't see. They're microstructures. As I
04:21 22 mentioned, there's millions of them on the back
04:21 23 distributed across this area.

04:21 24 This is the quantum dot film. There's
04:21 25 really not much to see unless you have a light behind

04:21 1 it, but it's kind of a yellowish color. It's reacting
04:21 2 to the light in the room actually.

04:21 3 I'll just pass around one more item. The
04:21 4 diffusers are kind of uninteresting and really not part
04:21 5 of the claims in these patents.

04:21 6 So this is an optical film stack which
04:21 7 has those prismatic structures. And again, it has kind
04:22 8 of a very interesting optical effect, but it is very
04:22 9 clear. Light can go through it.

04:22 10 Oh, yeah, there is one more. I'm sorry.

04:22 11 This is the reflector sheet that's on the
04:22 12 back. This is that very highly reflective white
04:22 13 material. So there you have it.

04:22 14 BY MR. REICH:

04:22 15 Q. Thank you, Mr. Credelle. You can return to
04:22 16 the stand.

04:23 17 MR. REICH: I'll turn this off.

18 BY MR. REICH:

04:23 19 Q. Now that we know about all the components in
04:23 20 these models, do you have an animation that will help
04:24 21 us understand how the light flows as you've
04:24 22 demonstrated?

04:24 23 A. Yes. I do have an animation. I'll try to
04:24 24 explain it now that you've seen how it works in real
04:24 25 life.

04:24 1 Q. What are you showing here on the screen?

04:24 2 A. So the films you just saw there, the five
04:24 3 films are indicated on this diagram. Starting with the
04:24 4 reflector, it's a cross section greatly expanded in
04:24 5 scale in one direction. The light guide plate, the
04:24 6 quantum dot layer, the optical film stack, and finally
04:24 7 the LCD layer. I'm going to ignore the diffusers
04:24 8 because they aren't important for this discussion.

04:24 9 Q. And on the left side, what are you showing?

04:24 10 A. The left is a photograph, I think we might
04:24 11 have seen this earlier today, that shows the components
04:24 12 stack starting with that reflector and then the light
04:24 13 guide and all the other films.

04:24 14 Q. And we may have seen it tipped over earlier
04:24 15 today. Why is yours tipped up?

04:25 16 A. Well, it's tipped up because that's actually
04:25 17 the way they are in the product. I believe I can make
04:25 18 this statement that all monitors -- almost all monitors
04:25 19 have the LEDs along the bottom. There are some that
04:25 20 have more than one set of LEDs that they have to be
04:25 21 super bright, but generally the LEDs are on the bottom
04:25 22 and the display is oriented like we use it as a
04:25 23 monitor.

04:25 24 Q. What is the first component that you want to
04:25 25 emphasize in this animation?

04:25 1 A. The light guide. The light guide plate is a
04:25 2 very critical component I'd like to describe first.

04:25 3 Q. And what are you showing here?

04:25 4 A. So this light guide plate, if you tip it
04:25 5 sideways, you'll see those lenses, those lenticular
04:25 6 lenses, on the front surface. When we do a cross
04:25 7 section, you can't really see them. So I'm going to
04:25 8 tip it back now to show the light flow.

04:25 9 Q. Now, what are you showing with the light, the
04:25 10 LED at the bottom?

04:25 11 A. I'm indicating there's an LED at the bottom of
04:26 12 this light guide just like the teardown demonstration.
04:26 13 Those LEDs emit light over a broad range of angles much
04:26 14 like you may have seen, you know, lights in your home
04:26 15 that are LEDs, the light can come out at wide angles.
04:26 16 They're very bright. And I've indicated a few of those
04:26 17 light rays here for my illustration.

04:26 18 Q. For simplicity, can we follow just one of
04:26 19 those light rays?

04:26 20 A. It's easier to understand if we just do them
04:26 21 one at a time, yes.

04:26 22 Q. What are you showing here?

04:26 23 A. I'm showing a light ray that strikes the walls
04:26 24 of this light guide plate where there are no
04:26 25 microcavities. And because of this principle of total

04:26 1 internal reflection, the light guide being plastic
04:26 2 surrounded by air, it will -- the sidewalls will act as
04:26 3 mirrors. So the light is effectively trapped if it
04:26 4 doesn't hit the microstructures.

04:26 5 When it gets to the top, there's a reflective
04:26 6 mirror that will send the light back down again, and
04:27 7 when it gets to the bottom, it'll probably hit the LED
04:27 8 and be reemitted as a scattered light, but this is --
04:27 9 this is the way the light would flow.

04:27 10 Q. So is the light trapped until it finds the
04:27 11 right angle?

04:27 12 A. Essentially, yes.

04:27 13 Q. Now, let's follow a beam, if you will, that
04:27 14 hits a microcavity. What happens then?

04:27 15 A. So I've drawn a different light ray with a
04:27 16 slightly different angle, and now that happens to
04:27 17 strike one of these microstructures. I've shown a
04:27 18 magnified view of what these microcavities look like as
04:27 19 a cross section. They have kind of an annular ring
04:27 20 around the structure, and I'll show some close-ups of
04:27 21 that again later.

04:27 22 But all of those surfaces can be used to
04:27 23 either reflect or refract or with TIR, total internal
04:27 24 reflection, pass the light through that little
04:27 25 structure.

04:27 1 Q. If we're using Mr. Buresh's analogy of being
04:27 2 locked in a room, is this the key to get out?

04:28 3 A. This is the key to get out. This is the key
04:28 4 to get out. There are a lot of keys.

04:28 5 Q. Now, can we follow just one beam going up and
04:28 6 back for simplicity?

04:28 7 A. Yes. So a light ray will strike -- if we
04:28 8 think of a light ray as like a bundle of light, some of
04:28 9 the light will hit part of the microstructure that will
04:28 10 cause the light to immediately go to the right, which
04:28 11 is to the front. That's where we want the light to go
04:28 12 eventually, all the light. But some of it will go to
04:28 13 the back.

04:28 14 Q. Now, if the goal is to get light to the front,
04:28 15 why would you ever want light to go to the back?

04:28 16 A. It's actually by design. To make a more
04:28 17 efficient, more uniform light source, using the back
04:28 18 reflector, which is a diffuse surface, helps to smooth
04:28 19 out the nonuniformities that might be occurring by
04:28 20 having these little sharp microdots.

04:28 21 So when that light hits the back surface, it
04:29 22 is a diffuse white material. It will send light out in
04:29 23 different directions, and that helps to homogenize, if
04:29 24 you will, the light coming from this light guide plate.

04:29 25 Q. So is this actually an intentional part of a

04:29 1 design to send light back towards the rear reflector?

04:29 2 A. Yes. As a matter of fact, almost 50 percent
04:29 3 of the incoming light goes backwards. It's
04:29 4 counterintuitive, but this makes a better backlight.
04:29 5 And I'll have to say, in the old days, that was not the
04:29 6 way they were built.

04:29 7 Q. And again, you've got a lot of arrows.

04:29 8 Can we just follow one to keep it simple?

04:29 9 A. Yes. I picked one of those. Of course all of
04:29 10 them will be involved in making light eventually, but
04:29 11 I'll pick one.

04:29 12 Q. So what do we have here at this stage of the
04:29 13 light flow?

04:29 14 A. So what I've shown is that the light that was
04:29 15 deflected to the right and that was deflected to the
04:29 16 left will finally get to those lenses. The lenses are
04:29 17 on that front surface. And those collimating lenses
04:29 18 will change the angle or direction of the light going
04:30 19 forward from that point.

04:30 20 Q. We've also heard a little bit about this idea
04:30 21 of collimation.

04:30 22 Do you recall that?

04:30 23 A. Yes. I do.

04:30 24 Q. And I believe, if I heard it correctly,
04:30 25 Mr. Buresh said in opening -- he picked two of the

04:30 1 patents. He called them the "collimating patents."

04:30 2 Do you recall that?

04:30 3 A. Yes. I do.

04:30 4 Q. And he suggested that you don't want a system
04:30 5 with lenses in collimation in an LCD display. It's
04:30 6 somehow bad for monitors.

04:30 7 Do you recall?

04:30 8 A. I heard him reach that conclusion based on one
04:30 9 of the figures.

04:30 10 Q. Based on your experience in the industry at
04:30 11 LCD displays, why is that wrong?

04:30 12 A. Well, it turns out that these collimating
04:30 13 lenses are actually more effective at steering the
04:30 14 light. I like to think of this as turning where the
04:30 15 light's going to go.

04:30 16 And since there are light rays coming from
04:30 17 everywhere along that back surface, you have a lot of
04:30 18 light rays that Mr. Buresh didn't consider. He just
04:31 19 looked at a few.

04:31 20 So every bundle of light is going to have a
04:31 21 different angle and hit these lenses in such a way that
04:31 22 they'll give a uniform distribution of light to the
04:31 23 user in a more effective way than if you don't have
04:31 24 lenses.

04:31 25 Q. And to be clear, Mr. Credelle, have you

04:31 1 personally designed LCD displays in optical systems?

04:31 2 A. I have.

04:31 3 Q. So this is 100 percent in your lane; is that
04:31 4 fair?

04:31 5 A. It's in my lane.

04:31 6 Q. And so would it be wrong to suggest that with
04:31 7 a system like this, that has the lenses, that does the
04:31 8 collimation, you're going to have happy person here and
04:31 9 sad person here?

04:31 10 A. That's a mistake. That's simply a mistake.
04:31 11 It doesn't work that way.

04:31 12 Q. Now, what's the next step for this light as it
04:31 13 leaves the lenses collimated?

04:31 14 A. The next thing that can happen is the quantum
04:31 15 dot layer. So the light leaves the light guide plate,
04:32 16 and as I described earlier, some of those blue light
04:32 17 rays will hit quantum dots. And when they do, they'll
04:32 18 create some red energy and some green energy coming out
04:32 19 of the quantum dot film.

04:32 20 Q. And then what happens when it goes to the
04:32 21 optical film stack?

04:32 22 A. When it reaches the film stack, a couple of
04:32 23 things can happen depending on the angle of the light.
04:32 24 Some of the light will go through that sheet. Some of
04:32 25 it will be reflected using that total internal

04:32 1 reflection concept and go backwards.

04:32 2 The light that goes backwards offers another
04:32 3 chance for quantum dots to be struck, create more red
04:32 4 and green light.

04:32 5 And I think you saw that when we put the
04:32 6 optical film stack on top, the brightness got better
04:32 7 because we're recycling and reusing that light that --
04:32 8 getting it organized. And also, the amount of red and
04:33 9 green went up because we have more red and green dots,
04:33 10 more quantum dots being struck.

04:33 11 So that's the way this system works, and it
04:33 12 depends on that recirculating or multiple passages
04:33 13 through the film to achieve the desired goal, which is
04:33 14 white, bright light over a distribution of angles that
04:33 15 meets the customer's requirement.

04:33 16 Q. And is this another example here, this total
04:33 17 internal reflection, in which light is trapped until it
04:33 18 receives the key to get out at the right viewing angle?

04:33 19 A. That's correct. And the key is the angle of
04:33 20 incidence, if you will. As the light makes these
04:33 21 traverse passages, the angles will change. And
04:33 22 eventually the substantial portion or the majority of
04:33 23 the light will exit towards the LCD.

04:33 24 Q. And is that what you're showing here?

04:33 25 A. And finally -- yes.

04:33 1 Finally, that's what I'm showing here. I'm
04:34 2 showing additional quantum dots can be hit by that one
04:34 3 light ray. But now imagine billions of light rays
04:34 4 going through this system, and you have a good
04:34 5 opportunity to make a bright, efficient display.

04:34 6 Q. Now, we've done one teardown, and walk through
04:34 7 the light flow.

04:34 8 Do you have a complete list of all the
04:34 9 products that infringe in this case?

04:34 10 A. I do.

04:34 11 Q. What are you showing here?

04:34 12 A. So I've grouped these monitor products. They
04:34 13 all have a model name by patent. And we've identified
04:34 14 these groups of monitors as infringing the patents that
04:34 15 are in the box next to it.

04:34 16 Q. Are we going to have to look at components for
04:34 17 all 90-plus products in this case?

04:34 18 A. Fortunately not. It would take us weeks to do
04:34 19 that, but I've done, as you say, the heavy lifting and
04:35 20 identified some representative products that we can --
04:35 21 that can be used in our analysis to show infringement.
04:35 22 And those representative products will apply to all the
04:35 23 other models within that grouping.

04:35 24 Q. And what is a representative product?

04:35 25 A. It's just that. It represents the performance

04:35 1 and attributes of all the other modules, all the other
04:35 2 monitors. There may be slight differences in the
04:35 3 spacing of the dots or maybe in the shape of the
04:35 4 lenses, but they all have the same characteristic.

04:35 5 So we proposed these two representative
04:35 6 products, and ASUS has accepted those as
04:35 7 representative.

04:35 8 Q. Now, why did you use two representative
04:35 9 products? I know we looked at one. But why two?

04:35 10 A. Well, I wanted to show that there's, you know,
04:35 11 some variety between these monitors. And I picked one
04:35 12 that has quantum dots and one that does not. And I
04:35 13 can -- will show the infringement under each of those
04:36 14 conditions.

04:36 15 Q. And do these monitors turn out to otherwise be
04:36 16 very similar?

04:36 17 A. Otherwise, they are very similar. Yes.

04:36 18 Q. Can you turn to Tab JTX-5 in your binder?

04:36 19 A. Okay. I'm there.

04:36 20 Q. What is JTX-5?

04:36 21 A. This is a stipulation agreement between SVV
04:36 22 and ASUS that these representative products will
04:36 23 represent the models for infringement purposes. That
04:36 24 means if the representative product infringes, they all
04:36 25 infringe in that category.

04:36 1 MR. REICH: Your Honor, we move to admit
04:36 2 JTX-5 into evidence.

04:36 3 MR. BURESH: No objection.

04:36 4 THE COURT: Admitted.

04:36 5 BY MR. REICH:

04:36 6 Q. And so if the jury wants to ever look at this
04:36 7 list, that's at JTX-5?

04:36 8 A. JTX-5 should be in your binders, I believe.

04:36 9 Q. Now, you mentioned you came up with kind of
04:36 10 the representative products.

04:37 11 How did you get to that conclusion based on
04:37 12 the ultimate set of evidence?

04:37 13 A. It came down to looking at all of the teardown
04:37 14 data either done by SVV or myself and looking for
04:37 15 similarities and identifying a product that would fit
04:37 16 this -- would be a representative product, just like
04:37 17 the words say.

04:37 18 Q. Now, for the teardowns of the representative
04:37 19 products, are those available at PTX-109 and PTX-116?

04:37 20 A. Yes. That's correct.

04:37 21 Q. Now, we heard that Dr. Vasylyev did some of
04:37 22 the teardowns as well earlier.

04:37 23 How do you know that Dr. Vasylyev's teardowns
04:37 24 are good teardowns or accurate teardowns?

04:37 25 A. I've done a lot of teardowns myself, and I did

04:37 1 for this case. But in the past, I have a lot of
04:37 2 experience in that area.

04:37 3 I visited Sacramento on multiple occasions to
04:38 4 examine the actual teardown parts that you see on the
04:38 5 screen. I looked at the data. I looked at the tools
04:38 6 that Dr. Vasylyev has in his lab and how he
04:38 7 characterized and photographed and recorded the
04:38 8 information.

04:38 9 I was very impressed. It's a small company.
04:38 10 But he did a very good job of highlighting and I say
04:38 11 recording the features so that I could make
04:38 12 recommendations regarding representative products.

04:38 13 Q. And have you personally torn down the
04:38 14 representative products yourself in this case?

04:38 15 A. Yes. I've done a couple of them myself.

04:38 16 Q. Based on your review, your oversight, your own
04:38 17 personal teardowns, were the teardowns of the ASUS
04:38 18 products in this case that are identified in PTX-109
04:38 19 and PTX-116 reliable and accurate?

04:38 20 A. I would call them reliable and accurate.

04:38 21 Q. All right. Are we now ready to get into that
04:39 22 infringement analysis?

04:39 23 A. Yes.

04:39 24 Q. Did you have some boards made with the
04:39 25 asserted claims?

04:39 1 A. Yes. To go through the claims, I made some
04:39 2 boards that are kind of a checklist as we go through.
04:39 3 And we can keep track -- I can keep track. We can keep
04:39 4 track of where we are in analyzing the claims.

04:39 5 MR. REICH: Your Honor, may I set up the
04:39 6 claim boards?

04:40 7 THE WITNESS: The first claim is quite
04:40 8 long. It takes two boards.

9 BY MR. REICH:

04:40 10 Q. Can you see this?

04:40 11 A. I can see it, and I have a copy.

04:40 12 Q. Now, is this the exact same claim language
04:40 13 that's found in the exhibits in the jurors' binder, the
04:40 14 patents themselves?

04:40 15 A. Yes. It's a word-for-word copy, but it's been
04:40 16 broken into small pieces. So it looks a little
04:40 17 different, but it's the same verbiage.

04:40 18 Q. And these little boxes, we added those?

04:40 19 A. We added boxes. And that's what we'll use to
04:40 20 kind of keep track of our infringement analysis.

04:40 21 Q. I'm not tall enough to reach it. It's where
04:41 22 it was before.

04:41 23 All right. Where should we start with the
04:41 24 '342 patent?

04:41 25 A. Let's start with Claim 1.

04:41 1 Q. And this first part up here, an illumination
04:41 2 apparatus comprising, there's no checkbox here.

04:41 3 What is this part of the patent?

04:41 4 A. It's referred to as the preamble. It's not a
04:41 5 limiting claim term, but it describes generally what is
04:41 6 to follow, and everything below it is included in this,
04:42 7 in this case, an illumination apparatus.

04:42 8 Q. And so what are the illumination apparatuses
04:42 9 that you identified as infringing the '342 patent?

04:42 10 A. That would be all of the models of ASUS
04:42 11 products listed in the red box for the '342, and the
04:42 12 agreed representative product is indicated as the
04:42 13 PA278CV.

04:42 14 Q. And the jury can get the list of the full set
04:42 15 of products in JTX-5?

04:42 16 A. Those are all in JTX-5, correct.

04:42 17 Q. And so this is the other representative
04:42 18 product that we haven't torn down. We're going to see
04:42 19 it?

04:42 20 A. That's right. That's right.

04:42 21 Q. Now, for this first limitation, it begins "a
04:42 22 planar waveguide." It ends in "three-dimensional
04:42 23 textured surface." I won't read the whole thing.

04:42 24 Did your analysis show that this claim
04:42 25 limitation is met?

04:42 1 A. Yes. It did.

04:42 2 Q. Now, it's pretty long. Can we break it down?

04:42 3 A. Let's do that.

04:42 4 Q. What is the first part of this claim
04:43 5 limitation talking about in the '342 representative
04:43 6 product?

04:43 7 A. It has identified what I showed you as -- I
04:43 8 called it a "light guide." That's a term that I use
04:43 9 probably more than "waveguide." It's planar. It's a
04:43 10 rectangular box. It's very optically transmissive so
04:43 11 the light can go through it. So that light guide plate
04:43 12 does satisfy this particular highlighted area.

04:43 13 Q. And is the evidence for this product found in
04:43 14 PTX-109?

04:43 15 A. Yes.

04:43 16 Q. And that's the PA278CV?

04:43 17 A. Yes, that's correct.

04:43 18 Q. And just so we're clear, the other
04:43 19 representative product, the PG32UQ, it's also in this
04:43 20 bucket. We're just only focused on this one for this
04:43 21 particular patent; is that right?

04:43 22 A. Yes.

04:43 23 Q. Now, one thing I wanted to ask you about the
04:44 24 preamble here that I missed, what does the word
04:44 25 "comprising" mean?

04:44 1 A. "Comprising" means including. So everything
04:44 2 below it needs to be satisfied in the product, but
04:44 3 there can be other features that aren't on this list,
04:44 4 but these as a minimum have to be shown to be in the
04:44 5 accused product.

04:44 6 Q. Now, going back to your slide, the light guide
04:44 7 that's in your slide is bright yellow, and that's not
04:44 8 what we saw.

04:44 9 Did you add that highlighting?

04:44 10 A. Yes. Throughout this presentation I'll be
04:44 11 using some highlighting to point out, you know, where
04:44 12 it is in the picture. So in this case it's highlighted
04:44 13 yellow, but in fact it really is clear, as you saw.

04:44 14 Q. Now, moving on to the rest of this limitation
04:44 15 talking about a three-dimensionally textured surface,
04:44 16 where did you find that in the representative '342
04:44 17 product?

04:44 18 A. Yes. For that, I've identified the top
04:44 19 surface, the lens surface that we saw, as the
04:45 20 three-dimensionally textured surface, and the backside
04:45 21 is planar. That's where the micro dots -- or
04:45 22 microcavities are located, and they're substantially
04:45 23 parallel, as you saw.

04:45 24 And showing a microscopic image of those
04:45 25 microcavities, you can see them on the right image, and

04:45 1 in kind of a faint gray and black, you're seeing the
04:45 2 lens is out of focus. The thickness of this like -- is
04:45 3 about 2 millimeters, and we can't really focus on both
04:45 4 surfaces at the same time.

04:45 5 Q. And so may I put a checkmark by this
04:45 6 limitation?

04:45 7 A. Yes.

04:45 8 Q. For the next limitation: Said planar
04:46 9 waveguide having a light input edge disposed between
04:46 10 said three-dimensionally textured surface and said
04:46 11 planar surface.

04:46 12 Did your analysis show that this claim
04:46 13 limitation is met?

04:46 14 A. Yes. It did.

04:46 15 Q. How so?

04:46 16 A. The front edge that I showed you in the
04:46 17 teardown that's facing the LEDs is a light input edge.
04:46 18 That's where the LED light leaves the LEDs themselves
04:46 19 and goes into the light guide. That edge is between
04:46 20 these two surfaces.

04:46 21 Q. We're talking about this edge?

04:46 22 A. Yes. The edge without the tape.

04:46 23 Q. And why are the LEDs white in this example?

04:46 24 A. Yes. The lower image it shows the LEDs
04:46 25 illuminated. This particular product doesn't use the

04:47 1 quantum dot technology so, therefore, it needs a white
04:47 2 LED. So the white LED generates the light that goes
04:47 3 into the light guide plate.

04:47 4 Q. May I put a checkmark by this limitation?

04:47 5 A. Please do.

04:47 6 Q. The next limitation is: A light source
04:47 7 positioned adjacent to said light input edge and
04:47 8 optically coupled to said planar waveguide.

04:47 9 Did your analysis show that this claim
04:47 10 limitation is met?

04:47 11 A. Yes. It did.

04:47 12 Q. All right. It looks like we have something
04:47 13 that's highlighted in blue. What are you trying to
04:47 14 show?

04:47 15 A. So occasionally the Court will construe a term
04:47 16 that might be confusing or it might have more than one
04:47 17 meaning. In this case, the term "optically coupled" is
04:47 18 construed by the Court to mean providing for the
04:47 19 transfer of light from one optical component to
04:48 20 another.

04:48 21 Q. And does the jury have the Court's
04:48 22 constructions in their binder?

04:48 23 A. I believe they do.

04:48 24 Q. Now, applying the Court's claim construction,
04:48 25 how is this limitation met?

04:48 1 A. This limitation is met because the light
04:48 2 source, the LEDs, transfers light or energy to the
04:48 3 planar waveguide. I put a little circle around the
04:48 4 LEDs in that 3D picture or the perspective picture, and
04:48 5 you can see the LEDs lit up at the bottom image,
04:48 6 actually same image as before.

04:48 7 Q. And that's -- when we put the light guide into
04:48 8 the teardown, the whole thing got bright; is that
04:48 9 right?

04:48 10 A. Yes. The LED light went into that end with
04:48 11 pretty good efficiency.

04:48 12 Q. May I put a check by this limitation?

04:48 13 A. Yes.

04:48 14 Q. The next limitation begins "said planar
04:49 15 waveguide" and ends with "total internal reflection."
16 It's a longer one.

04:49 17 Did your analysis show that this claim
04:49 18 limitation is met?

04:49 19 A. Yes. It did.

04:49 20 Q. Why did you highlight "total internal
04:49 21 reflection" in blue?

04:49 22 A. This is another example of a Court
04:49 23 construction for total internal reflection.

04:49 24 Q. What is the Court's construction?

04:49 25 A. I'll read it. It's: The phenomenon that

04:49 1 involves the reflection of all the incident light off
04:49 2 the boundary between a first medium and a second medium
04:49 3 of lower refractive index, where the angle of incidence
04:49 4 to that medium exceeds the critical angle.

04:49 5 It's very wordy, but I have some pictures to
04:49 6 help put that in context.

04:49 7 Q. All right. How does this Court's claim
04:49 8 construction apply in the representative '342 patent
04:49 9 product?

04:49 10 A. So applying this construction, we are
04:50 11 determining if that property is satisfied by light
04:50 12 leaving the LEDs and going up this light guide plate.

04:50 13 Q. And what are you showing here?

04:50 14 A. If we look at a detail of two light rays I've
04:50 15 shown that look like they're mirror image reflections,
04:50 16 I want to show you where the TIR angle is.

04:50 17 Q. What is this little dashed line?

04:50 18 A. So I'm going to draw a normal line -- a normal
04:50 19 incident line to that plane. That's the way the
04:50 20 optical formulas are developed. And the critical angle
04:50 21 depends on the index of refraction of the material
04:50 22 versus what's on the other side, which in this case is
04:50 23 air. I think Dr. Vasylyev mentioned a little bit about
04:50 24 that.

04:50 25 For these materials, that angle, just for your

04:50 1 information, is about 42 degrees. And that means that
04:50 2 any light ray that has a larger angle than 42 degrees
04:51 3 will be perfectly reflected off that edge even though
04:51 4 there's no mirror there. It acts like a mirror.

04:51 5 Q. So that light is trapped back?

04:51 6 A. That light is trapped and goes forward. It
04:51 7 does not escape. And as long as that angle is met on
04:51 8 these two surfaces in the light guide plate, it'll stay
04:51 9 in that light guide plate.

04:51 10 Q. And so the planar waveguide is configured to
04:51 11 propagate the light like this using internal reflection
04:51 12 in the '342 accused products?

04:51 13 A. Yes. The propagation is really a function of
04:51 14 these two parallel surfaces that are flat and smooth,
04:51 15 and when it doesn't hit the microcavity, it will do
04:51 16 this bouncing.

04:51 17 Q. May I put a check by this limitation?

04:51 18 A. Yes.

04:51 19 Q. And just in case any of the jury wants to look
04:52 20 at the claims, are those located at the back of the
04:52 21 patents?

04:52 22 A. Yes. Each patent you can see the total claim
04:52 23 list at the back of each patent.

04:52 24 Q. Now, the next limitation begins "a plurality
04:52 25 of light-deflecting elements" and ends with "said

04:52 1 planar surface." It's another long one.

04:52 2 Did your analysis show that this claim
04:52 3 limitation is met?

04:52 4 A. Yes. It did.

04:52 5 Q. Can we break it down?

04:52 6 A. I think that'll be helpful.

04:52 7 Q. So it starts "light deflecting elements being
04:52 8 surface relief -- discrete surface relief features,"
04:52 9 what did you identify in the '342 representative
04:52 10 product for this limitation?

04:52 11 A. When you look under a microscope at those
04:52 12 microstructures, you'll see the cavity shape, which
04:52 13 I've shown on the right as a top view and a perspective
04:52 14 view. This has a surface relief. It has some high
04:52 15 points and some low points. Kind of looks like a
04:53 16 crater on the moon a little bit. That's the -- and
04:53 17 there are clearly discrete microcavities separated by
04:53 18 flat, smooth planar portions, as you can see from the
04:53 19 photograph.

04:53 20 Q. Now, this next portion talks about a
04:53 21 randomized two-dimensional pattern. That maybe seems
04:53 22 like to a layperson who's not in optics, like me, a
04:53 23 little contradictory.

04:53 24 But can you explain what's going on here?

04:53 25 A. Sure. I think by looking at this image, you

04:53 1 can see that these microcavities are not on a regular
04:53 2 grid. So when you make a pattern, you can have a
04:53 3 regular pattern like rows and columns in a spreadsheet,
04:53 4 or you can have an irregular pattern which is -- has
04:53 5 random positions.

04:53 6 But they're not truly random because the
04:53 7 location has to be known to be able to fabricate this
04:54 8 device.

04:54 9 So the optical engineers will randomize this
04:54 10 two-dimensional pattern so that we avoid, I think
04:54 11 Dr. Vasylyev called them hot spots and cold spots, when
04:54 12 you look at the light coming out of this system, and
04:54 13 you can see that the spacings are different. They are
04:54 14 on an irregular -- it's an irregular pattern, but it is
04:54 15 randomized to accomplish the light extraction that's --
04:54 16 that's the goal of this backlight system.

04:54 17 Q. And you mentioned it a little bit briefly.

04:54 18 How are these randomized or irregular patterns
04:54 19 designed for light guide plates?

04:54 20 A. For light guide plates, the spacing of these
04:54 21 dots depends on really two factors. One is that near
04:54 22 the LEDs, you want to have less light bouncing out; and
04:54 23 far away, you want to have more because it's being used
04:54 24 up, if you will. So the spacing and density of these
04:55 25 dots changes from the bottom to the top.

04:55 1 But in addition, you want the pattern to be
04:55 2 randomized so you don't see these hot spots. And all
04:55 3 that's done in a computer.

04:55 4 And they do some analysis. They do some
04:55 5 testing. And once they decide they have a pattern they
04:55 6 like, it becomes a computer program, a file. And that
04:55 7 computer CAD file goes into the laser machine that
04:55 8 creates these dots.

04:55 9 So they just go and very fast hit all those
04:55 10 locations across this sheet according to that
04:55 11 predetermined pattern, that pattern that's created by
04:55 12 the CAD program.

04:55 13 Q. May I put a check by this limitation?

04:55 14 A. Yes.

04:55 15 Q. The next limitation begins "a plurality of
04:55 16 elongated cylindrical lenses" and ends with
04:56 17 "light-deflecting elements" so that we can follow
04:56 18 along.

04:56 19 Did your analysis show that this claim
04:56 20 limitation is met?

04:56 21 A. Yes. It did.

04:56 22 Q. What are the elongated cylindrical lenses in
04:56 23 the representative product?

04:56 24 A. In these products, there are these cylindrical
04:56 25 lenses that run completely from the bottom to the top

04:56 1 of the light guide plate. And we've measured them.

04:56 2 And SVV's lab has a 3D microscope which allows you to
04:56 3 get these profiles so you can see what the profile of
04:56 4 that lens looks like.

04:56 5 And this one you can see has a cylindrical
04:56 6 shape, and it has some focusing characteristics due to
04:56 7 that cylindrical shape. So it is a lens.

04:56 8 Q. And how are these lenses designed in the
04:56 9 manufacturing?

04:56 10 A. Once again, the lenses are designed by a CAD
04:56 11 program. In this case, the CAD program is going to
04:57 12 determine how tall they should be, how wide they should
04:57 13 be, and how many they should be spaced apart.

04:57 14 They are a regular pattern. They're just
04:57 15 linear lenses. Once that data's accumulated, a mold is
04:57 16 made so that you can actually mold these surfaces in a
04:57 17 kind of a stamping machine to make these lenses.

04:57 18 Q. And are the lenses in the microcavities
04:57 19 designed in conjunction with each other?

04:57 20 A. They're designed in conjunction with each
04:57 21 other because there needs to be -- because there's an
04:57 22 alignment that will happen between these two. So the
04:57 23 lenses are on the top. The microstructures are on the
04:57 24 bottom.

04:57 25 And that alignment is done, again, in the

04:57 1 tool, in the manufacturing tool. You'll create the
04:57 2 lenses first, and then you'll make those dots. And
04:57 3 you'll put them always in the same place.

04:57 4 And we've done some testing to show that two
04:57 5 light guides, light guides from two different -- of the
04:58 6 same model under a microscope are exactly the same.

04:58 7 Q. All right. Well, focusing on the rest of this
04:58 8 limitation, how are the elongated cylindrical lenses in
04:58 9 the light-deflecting elements in an energy-receiving
04:58 10 relationship?

04:58 11 A. Light is energy, as we heard this morning. So
04:58 12 basically, the light from the microstructures, whether
04:58 13 it's directly or through the back surface, provides
04:58 14 light energy that will go towards the lenses on the
04:58 15 right colored with the turquoise box. So they are in a
04:58 16 energy-receiving relationship. Light goes in from the
04:58 17 microstructures to the light, to the lenses, through
04:58 18 the light guide.

04:58 19 Q. May I put a check by this limitation?

04:58 20 A. Yes.

04:58 21 Q. Now, we still have some aspects of this claim
04:59 22 on another board. Is that okay?

04:59 23 All right. For this next limitation,
04:59 24 continuing in the '342 patent, Claim 1, the limitation
04:59 25 is: Wherein said planar waveguide and said planar lens

04:59 1 array form a monolithic optically transmissive
04:59 2 structure.

04:59 3 Did your analysis show that this claim
04:59 4 limitation is met?

04:59 5 A. Yes. It did.

04:59 6 Q. How is this claim limitation met in the '342
04:59 7 representative product?

04:59 8 A. When we examined the light guide plate that
04:59 9 you saw earlier, it is one structure. We examined it
04:59 10 to see if there's any glue lines or any molding lines,
05:00 11 but it is one monolithic structure. Lenses are on the
05:00 12 top. Microstructures are on the bottom. So it
05:00 13 satisfies this claim element.

05:00 14 Q. May I check this one off?

05:00 15 A. Yes.

05:00 16 Q. The next limitation begins "wherein at least
05:00 17 one of said plurality of light-deflecting elements" and
05:00 18 ends with "cylindrical lenses."

05:00 19 Did your analysis show that this claim
05:00 20 limitation is met?

05:00 21 A. Yes. It did.

05:00 22 Q. Let's break this one in half.

05:00 23 How -- what are you showing here with respect
05:00 24 to the PA278CV representative product?

05:00 25 A. A key part of this claim element is that the

05:00 1 light-deflecting elements have a curved surface sloped
05:00 2 at an angle with respect to the planar surface, which
05:00 3 is the flat surface on the back of the light guide
05:00 4 plate.

05:00 5 And again, we've taken careful measurements of
05:01 6 those shapes that you see and identified a curved
05:01 7 surface that's annular in shape. So there's a curved
05:01 8 surface that can interact with the light that's in the
05:01 9 waveguide.

05:01 10 Q. And with respect to this next part of the
05:01 11 claim, what is being referred to here in the PA278CV
05:01 12 product for this predetermined alignment that's being
05:01 13 discussed?

05:01 14 A. This claim element simply says that there
05:01 15 needs to be a predetermined or known alignment between
05:01 16 the top and bottom surfaces. I've indicated a couple
05:01 17 microcavities that happen to be at the center of a
05:01 18 lens. Because the pattern is randomized, there are
05:01 19 others that are at different locations.

05:01 20 But because the location of the lenses is
05:01 21 predetermined, the location of the microcavities is
05:01 22 predetermined. And the tool that makes these two parts
05:02 23 indexes one to the other. We have a predetermined
05:02 24 alignment between those dots on the bottom that are
05:02 25 randomized and the linear lenses on the top which are

05:02 1 regular.

05:02 2 Q. And so about this predetermined issue, are the
05:02 3 lenses and the microstructures in this waveguide from
05:02 4 that product, just a different one, the same as the one
05:02 5 in that computer monitor?

05:02 6 A. In this computer monitor, yes. It is the same
05:02 7 as the 32-inch that I did for the teardown.

05:02 8 Q. Because these both came from the same product?

05:02 9 A. They came from a -- yeah. They came from the
05:02 10 same model number, but we bought -- I think we bought
05:02 11 three of them. But these -- this is two of the light
05:02 12 guides from two that we purchased.

05:02 13 Q. May I put a check by this limitation?

05:02 14 A. Yes.

05:02 15 Q. This next limitation says "wherein the area"
05:03 16 and ends with "elongated cylindrical lenses."

05:03 17 Did your analysis show that this claim
05:03 18 limitation is met?

05:03 19 A. Yes. It did.

05:03 20 Q. How so?

05:03 21 A. This one's fairly straightforward. There's a
05:03 22 little math. The lenses are actually 347 millimeters
05:03 23 long. It's basically the height of the light guide
05:03 24 plate and about 150 microns or .15 millimeters wide.
05:03 25 Whereas the cavities are 60 microns in diameter.

05:03 1 So you run the math. I think it's pretty
05:03 2 clear that the lenses are much larger than the
05:03 3 microcavities. In fact, the microcavities are 20,000
05:03 4 times smaller than the lens.

05:03 5 Q. May I put a checkmark by this limitation?

05:03 6 A. Yes. Please do.

05:03 7 Q. For the next limitation, "wherein each of said
05:03 8 plurality of light-deflecting elements" and ending with
05:04 9 "the plurality of elongated cylindrical lenses." It's
05:04 10 the last claim limitation.

05:04 11 Did your analysis show that this claim
05:04 12 limitation is met?

05:04 13 A. Yes. It did.

05:04 14 Q. How is this claim limitation met in the
05:04 15 PA278CV representative product?

05:04 16 A. This product has the microstructures that I've
05:04 17 identified previously. And as I also discussed
05:04 18 previously, the light that hits the -- any
05:04 19 microstructure, depending on its angle, will either go
05:04 20 to the front or to the back.

05:04 21 If it goes to the front, it goes directly to
05:04 22 the lenses. If it goes to the back, it bounces off
05:04 23 that white reflector and goes to the front. And
05:04 24 substantially, all of the light will go towards the
05:04 25 lens. So it's a -- certainly a substantial portion

05:04 1 will go towards the lenses from the light input edge of
05:04 2 the planar waveguide.

05:05 3 Q. And then substantially all of that light, does
05:05 4 it end up getting angularly directed, collimated, and
05:05 5 sent to the viewer?

05:05 6 A. Basically, that's what happens when you look
05:05 7 at the whole system. So we're starting with just the
05:05 8 light in the planar waveguide and extracting out, as
05:05 9 I've described.

05:05 10 As I said earlier, about 50 percent of the
05:05 11 light goes to the back. 50 percent goes to the front.
05:05 12 There'll be some losses, but a substantial portion of
05:05 13 that light goes towards the viewer. And the lenses and
05:05 14 the other features of the optics will create the light
05:05 15 distribution that the customer wants to see.

05:05 16 Q. And just to be clear on your 50/50, that's at
05:05 17 the microcavities. But then all that that goes back,
05:05 18 it comes forward too?

05:05 19 A. Yes. That white reflector has a very high
05:05 20 reflectivity, 98 percent or some number like that. So
05:05 21 you have very efficient reflection, but it's also
05:05 22 scattering which helps the optics. So all that light
05:06 23 finds its way to the LCD and then ultimately to the
05:06 24 user.

05:06 25 Q. May I check this one off?

05:06 1 A. Please do.

05:06 2 Q. All right. We've checked every limitation of
05:06 3 the '342 patent Claim 1.

05:06 4 What does that mean?

05:06 5 A. That means that Claim 1 is satisfied, and the
05:06 6 ASUS products infringe Claim 1.

05:06 7 Q. How many claims need to be infringed for the
05:06 8 patent to be infringed?

05:06 9 A. Just one claim is sufficient.

05:06 10 Q. But we have a second claim here; is that
05:06 11 right?

05:06 12 A. Yes.

05:06 13 Q. Now, what are you showing with respect to
05:06 14 Claim 21 of the '342 patent?

05:06 15 A. I'm showing that it is a dependent claim. I
05:06 16 think maybe in your instructions you heard about
05:06 17 independent claims and dependent claims. This is the
05:06 18 second category. And it depends from Claim 1, which
05:07 19 means all the elements of Claim 1 have to be satisfied,
05:07 20 and in addition, the language of Claim 21.

05:07 21 Q. How is dependent Claim 21 met by the accused
05:07 22 representative PA278CV product?

05:07 23 A. Well, when we zoom in on the sloped edge that
05:07 24 I showed you and I show a yellow arrow pointing to the
05:07 25 edge of this annular section of the microcavity, we can

05:07 1 actually calculate the angle versus position.

05:07 2 We've identified that this -- if you look at
05:07 3 the graph, it's actually a slope. It's actually the
05:07 4 shape of that wall, that annular ring.

05:07 5 And you can see there's a reasonable section
05:07 6 that's around 27 degrees -- that is 27. And the angle
05:07 7 does change. The claim says at least a portion of the
05:07 8 curved surface be at 27 degrees. So it's my -- this
05:08 9 claim element is satisfied. This claim is satisfied.

05:08 10 Q. Why is it beneficial to have at least a
05:08 11 portion of the cavity go through a 27-degree angle, a
05:08 12 curve?

05:08 13 A. There's a lot of work that went into
05:08 14 determining what are optimum tradeoffs in a lighting
05:08 15 design such as Dr. Vasylyev invented, and trading off
05:08 16 the light going down the -- down the light guide versus
05:08 17 the light being extracted and how it's extracted and
05:08 18 how it changes the angle. It turns out that 27 degrees
05:08 19 is kind of a reasonable compromise to achieve. It's
05:08 20 not an absolute number, but it's -- it was a
05:08 21 recommended angle to have in this system.

05:08 22 Q. May I check off Claim 21 as infringed?

05:08 23 A. Yes.

05:08 24 Q. All right. What's next?

05:08 25 A. What's next is the next patent, the '562.

05:09 1 Q. Are we starting with Claim 1 again?

05:09 2 A. Yes. This -- we're going to start with
05:09 3 Claim 1 and then include Claim 7.

05:09 4 Q. Again, the preamble, is it limiting?

05:09 5 A. It's not limiting. It does describe this is a
05:09 6 device. In fact, this is an edge-lit waveguide
05:09 7 illumination system as we heard about earlier this
05:09 8 morning.

05:09 9 Q. And what are the products that we're going to
05:09 10 be focusing on for the '562 patent?

05:09 11 A. Again, in JTX-5 is this model list of -- I'm
05:10 12 not sure I counted them up, but all the models in the
05:10 13 red box are infringing the '562 and that's what I
05:10 14 intend to show, with the representative product being
05:10 15 the PG32UQ, which is the model number of the device I
05:10 16 tore down and showed you this morning -- or this
05:10 17 afternoon.

05:10 18 Q. For the first limitation beginning with "a
05:10 19 thin planar body" and ending with "broad surface area,"
05:10 20 did your analysis show that this claim limitation was
05:10 21 met by the PG32UQ representative product?

05:10 22 A. Yes.

05:10 23 Q. Let's break it down. What is the thin planar
05:10 24 body?

05:10 25 A. That would be the light guide plate that we

05:10 1 discussed before.

05:10 2 Q. And is that optically transmissive?

05:10 3 A. Yes. As I showed, that is optically
05:10 4 transmissive to allow the light to go throughout that
05:10 5 light guide plate.

05:10 6 Q. And for the record, can the jury find this
05:11 7 information in PTX-116?

05:11 8 A. Yes. That's correct. I should have mentioned
05:11 9 it.

05:11 10 Q. Now, what about this next part of the
05:11 11 limitation? How are these met in the representative
05:11 12 product?

05:11 13 A. I'll start with the broad area surfaces.
05:11 14 There's a first and second broad area surface. I've
05:11 15 identified the lens side as the first broad area
05:11 16 surface and the back as the opposing second broad area
05:11 17 surface, and there are edges, as we saw, along the
05:11 18 perimeter of that light guide plate which satisfies the
05:11 19 requirement for edges.

05:11 20 Q. Is this the edge?

05:11 21 A. Yes.

05:11 22 Q. May I check this limitation off?

05:11 23 A. Yes.

05:11 24 Q. For the next limitation: A plurality of
05:12 25 light-emitting diodes optically coupled to an edge of

05:12 1 said optically transmissive material.

05:12 2 How is this met in the '562 accused products?

05:12 3 A. This is met by the LEDs, the blue LEDs, we saw
05:12 4 earlier, and using the Court's construction, light is
05:12 5 coupled from those LEDs into the edge of the light
05:12 6 guide plate.

05:12 7 Q. And again, is that why we saw light go all the
05:12 8 way to the top when we plugged it in and showed it?

05:12 9 A. Exactly.

05:12 10 Q. May I check this limitation off?

05:12 11 A. Yes.

05:12 12 Q. The next limitation is: A plurality of linear
05:12 13 lenses formed in said first broad-area surface.

05:12 14 How is this limitation met in the PG32UQ
05:12 15 representative product?

05:12 16 A. We've identified the top surface as having an
05:13 17 array of linear lenses. A close-up picture is shown
05:13 18 here in the shape of those lenses for this product.
05:13 19 You can see the shape's a little different from the
05:13 20 other teardown, but it is a -- it is a linear lens.

05:13 21 Q. May I check this limitation off?

05:13 22 A. Yes.

05:13 23 Q. The next limitation begins "a plurality of
05:13 24 surface release features" and ends "predetermined
05:13 25 two-dimensional pattern."

05:13 1 Did your analysis show that this claim
05:13 2 limitation is met?

05:13 3 A. Yes. It did.

05:13 4 Q. How is this claim limitation met in the
05:13 5 representative PG32UQ product?

05:13 6 A. The microstructures on the rear side second
05:13 7 surface are shown in magnified image. They're the same
05:14 8 as we looked at previously. They are in a
05:14 9 two-dimensional pattern. It happens to be an irregular
05:14 10 pattern just like we saw earlier.

05:14 11 And again, that was designed by a computer.
05:14 12 So their locations are well known so the computer can
05:14 13 control the laser that creates these microcavities.

05:14 14 Q. And so can you explain, again, how can a
05:14 15 pattern be randomized in the first claim and
05:14 16 predetermined in this claim? How does that work again?
05:14 17 Can you explain it?

05:14 18 A. Sure. Actually, in both cases they're
05:14 19 predetermined, because as I explained, the -- the
05:14 20 method to make these dots is to have a computer program
05:14 21 and an optical engineer decide where the dots should be
05:14 22 to achieve the uniformity goals of the product, and
05:14 23 then to create a program that will instruct the laser
05:14 24 where to make the holes.

05:14 25 This claim element is -- requires a

05:14 1 predetermined pattern, which it is because of that
05:15 2 fact. Two-dimensional, it's an array. Doesn't have to
05:15 3 be randomized in this case, but they are randomized.

05:15 4 Q. May I check this limitation off?

05:15 5 A. Yes.

05:15 6 Q. For the next limitation beginning "wherein
05:15 7 said optically transmissive material" and ending "total
05:15 8 internal reflection," did your analysis show that this
05:15 9 claim limitation is met?

05:15 10 A. Yes.

05:15 11 Q. How is this claim limitation met in the PG32UQ
05:15 12 products?

05:15 13 A. Again, using the Court's definition or
05:15 14 construction for total internal reflection, I've
05:15 15 superimposed the little angles on this drawing. But
05:15 16 the light ray that I'm showing reflects off the walls
05:15 17 of the light guide plate and goes down to the opposing
05:15 18 edge where it strikes a reflector.

05:15 19 Q. And is this the light physics that we all got
05:16 20 to observe with our eyes when we saw the light go to
05:16 21 the top?

05:16 22 A. I'm sorry, the light?

05:16 23 Q. The physics of light. We got to observe this
05:16 24 here?

05:16 25 A. Yes. We did. If this concept did not apply,

05:16 1 what we would see is a very bright screen at the bottom
05:16 2 and nothing at the top. Without the ability to let the
05:16 3 light go throughout that area without TIR, without
05:16 4 total internal reflection, it wouldn't work.

05:16 5 Q. May I check this limitation off?

05:16 6 A. Yes.

05:16 7 Q. The next limitation is -- where it begins
05:16 8 "wherein said plurality of surface relief features" and
05:16 9 ends with "linear lenses."

05:16 10 Did your analysis show that this claim
05:16 11 limitation is met?

05:16 12 A. Yes. It did.

05:16 13 Q. How is this claim limitation met in the
05:16 14 representative PG32UQ product?

05:16 15 A. I'm showing the surface relief features on the
05:17 16 back of the light guide plate, and I'm showing light
05:17 17 that is striking one of those microstructures, and when
05:17 18 it strikes those microstructures, the extracted light
05:17 19 comes either to the right or to the left, and if it
05:17 20 goes to the left, it hits the reflector and comes to
05:17 21 the right, and all that light from all of these rays
05:17 22 and all of these microcavities will be distributed from
05:17 23 that surface of the plurality of lenses as it goes
05:17 24 through.

05:17 25 The idea, again, is to get a uniform flux of

05:17 1 light, well controlled by the use of these lenses, to
05:17 2 achieve the properties of the backlight.

05:17 3 Q. And were you able to observe these optimized
05:17 4 properties in the representative product?

05:17 5 A. I was.

05:17 6 Q. May I check this limitation off?

05:17 7 A. Yes.

05:17 8 Q. We've checked off all the limitations of
05:17 9 Claim 1 of the '562 product.

05:18 10 What does that mean?

05:18 11 A. That means that the accused monitors as
05:18 12 represented by the representative product infringe
05:18 13 Claim 1.

05:18 14 Q. Now, we have another claim for the '562,
05:18 15 Claim 7. Is that another dependent claim?

05:18 16 A. Yes. It is.

05:18 17 Q. How is Claim 7 of the '562 met by the
05:18 18 representative PG32UQ product?

05:18 19 A. Claim 7 is identifying the opaque reflective
05:18 20 layer, which was the tape that I showed you on the top
05:18 21 of the light guide plate and what Mr. Reich is showing
05:18 22 now. That is -- opaque is a reflective layer, and it
05:18 23 is configured to reflect light back down towards the
05:18 24 backlight to save that light that would normally be
05:18 25 lost.

05:18 1 Q. May I check this limitation off?

05:18 2 A. Yes.

05:18 3 Q. So is Claim 7 of the '562 patent infringed by
05:19 4 ASUS' products that are identified in JTX-5?

05:19 5 A. That is correct.

05:19 6 Q. So we have the '089 patent next. Where are we
05:19 7 starting with this one?

05:19 8 A. Again, we'll start with the preamble. Oh, in
05:19 9 Claim 14.

05:19 10 Q. So what is the Claim 19?

05:20 11 A. I'm sorry. Yes. What's accused is Claim 19.
05:20 12 And Claim 19 is a dependent claim, so you can see on
05:20 13 your screen, and it depends from Claim 14. So we will
05:20 14 have to analyze Claim 14 first and then move to
05:20 15 Claim 19.

05:20 16 Q. Now, the preamble in Claim 19 of -- or sorry
05:20 17 about that. The preamble in Claim 14 of the '089
05:20 18 patent is: A light converting optical system,
05:20 19 comprising.

05:20 20 A. Yes.

05:20 21 Q. We heard about light converting when
05:20 22 Mr. Buresh talked about this patent earlier.

05:20 23 Do you recall that?

05:20 24 A. I do.

05:20 25 Q. Is this preamble limiting?

05:20 1 A. It's not limiting.

05:20 2 Q. Does the jury have in their juror's notebook
05:20 3 an order from the Court saying that this preamble is
05:20 4 not limiting?

05:21 5 A. I believe they do.

05:21 6 Q. And so if Mr. Buresh was trying to suggest
05:21 7 that this was a limitation, that would have been
05:21 8 irrelevant?

05:21 9 A. That's correct.

05:21 10 Q. But you explained how quantum dots work.
05:21 11 Do they also convert light?

05:21 12 A. They do. They are light -- a light-converting
05:21 13 system converting one wavelength blue to another
05:21 14 wavelength red or green. That is a conversion. And it
05:21 15 is an optical system.

05:21 16 Q. And do they in fact convert light to energy
05:21 17 between those two steps?

05:21 18 A. They do.

05:21 19 Q. How so?

05:21 20 A. Atomically, if you look at the way quantum
05:21 21 dots work, they do -- they absorb a blue energy from
05:21 22 the blue light which creates an excited state, where an
05:21 23 electron is in a higher level state, and as that
05:21 24 electron relaxes back to its normal state, it can emit
05:22 25 a photon of a different color depending on its size.

05:22 1 So it is an electronic semiconductor feature,
05:22 2 but it's used in this case just to convert light from
05:22 3 blue to red or green.

05:22 4 Q. And we've been going through claims for a
05:22 5 while. We haven't had to check off any boxes on
05:22 6 titles, have we?

05:22 7 A. On what?

05:22 8 Q. On patent titles.

05:22 9 A. No. This -- the patent titles are just
05:22 10 somewhat -- somewhat instructive, but they're not part
05:22 11 of the claims.

05:22 12 Q. And again, this is that patent, the '089, that
05:22 13 does have the patent title that says light trapping,
05:22 14 fair?

05:22 15 A. Yes. It does have light trapping in the
05:22 16 claim, and there is light trapping in the device,
05:22 17 actually.

05:22 18 Q. And so can you explain -- we've talked about a
05:22 19 lot how there is, in fact, light trapping going on in
05:22 20 the ASUS monitors?

05:22 21 A. The light guiding system, that's been around
05:22 22 for a long time, but this idea of a planar waveguide
05:23 23 with smooth surfaces, the light will be trapped until
05:23 24 it hits a deflecting element. That's how light got
05:23 25 from the bottom to the top.

05:23 1 If it wasn't trapped, if it just leaked out,
05:23 2 we wouldn't have a good system. So that in these kind
05:23 3 of illumination systems would be called "trapping."
05:23 4 The light is trapped until it could hit something to be
05:23 5 expelled.

05:23 6 Q. So is light trapping a fair and descriptive
05:23 7 title that a person of skill in the art would know
05:23 8 relates to this technology?

05:23 9 A. They would absolutely know that this is a very
05:23 10 kind of intra-level understanding of how backlight
05:23 11 works.

05:23 12 Q. But it would not be fair or even relevant to
05:23 13 suggest that the claims technically require some sort
05:23 14 of light box in which no light comes out?

05:23 15 A. That is certainly correct. If you look at
05:23 16 the -- all the -- all the words in the claim, it
05:23 17 doesn't claim anything related to that.

05:23 18 Q. And just a few more on this. We also saw some
05:24 19 examples from the '089 patent.

05:24 20 Do you recall that?

05:24 21 A. Yes.

05:24 22 Q. A figure in the '089 patent or a description,
05:24 23 is that a limitation on the claims?

05:24 24 A. No.

05:24 25 Q. Why do we have figures and descriptions and

05:24 1 examples?

05:24 2 A. The figures and descriptions are to teach
05:24 3 about the invention kind of fundamentally how it works
05:24 4 and what it does, but they're just examples. And there
05:24 5 are many examples, typically, in these patents.
05:24 6 They're not meant to be restrictive to the claims.

05:24 7 Q. Is the only thing that matters for
05:24 8 infringement whether these claims are met by that
05:24 9 product?

05:24 10 A. The claims are what count.

05:24 11 Q. Well, we'll see if we hear more examples or
05:24 12 pull out a figure or something.

05:24 13 But let's go through the claims. Okay?

05:24 14 A. Okay.

05:24 15 Q. What are the products we're looking at for the
05:24 16 '089 patent?

05:24 17 A. It's a smaller list. There are three products
05:25 18 listed for the '089 patent. And the PG32UQ is one of
05:25 19 them. It is also the representative product.

05:25 20 Q. With respect to the first limitation beginning
05:25 21 "a broad area optically transmissive surface" and
05:25 22 ending in "total reflection," because we're at a
05:25 23 different patent, are we actually going to be talking
05:25 24 about some different layers in this one?

05:25 25 A. Yes. This patent will cover some of the

05:25 1 additional layers in the design that we haven't talked
05:25 2 about in detail yet.

05:25 3 Q. So what is the broad area optically
05:25 4 transmissive surface of the '089 patent in the PG32UQ
05:25 5 product?

05:25 6 A. What we identify as a broad area optical
05:25 7 transmissive surface is the optical film stack that I
05:25 8 showed you in the teardown. This is an optically
05:25 9 transmissive surface. Even though it has some kind of
05:26 10 interesting mirror effects that you can see, that is
05:26 11 the optically transmissive surface.

05:26 12 Q. And what are the surface relief features in
05:26 13 that optical film stack?

05:26 14 A. As we showed before in detail, these prismatic
05:26 15 or pyramidal structures surrounded by air are the
05:26 16 surface relief features of the optical film stack. And
05:26 17 they are configured to reflect light by this TIR
05:26 18 principle using the Court's construction, that if the
05:26 19 angles are correct when the light hits those pyramids,
05:26 20 it will be sent actually 180 degrees backwards. It's a
05:26 21 property of a -- if the prism has a certain angle,
05:26 22 you'll have the light go straight back.

05:26 23 Q. And may I check this limitation off?

05:26 24 A. Yes.

05:26 25 Q. The next limitation is a -- begins "a broad

05:27 1 area reflective surface" and ends "scattering light."

05:27 2 How's this limitation met in the PG32UQ

05:27 3 product?

05:27 4 A. I've identified the rear reflector, the white
05:27 5 sheet as a broad area reflective surface. It is
05:27 6 parallel to the optical film stack. And as I indicated
05:27 7 earlier, it is configured for scattering light if we --
05:27 8 it's not a mirror.

05:27 9 Q. That was something that I was confused about
05:27 10 just as a layperson.

05:27 11 Why is a white sheet reflective? It doesn't
05:27 12 look like a mirror to me.

05:27 13 A. The concept of reflection is to return the
05:27 14 light backwards in the opposite direction effectively,
05:27 15 and if it's a diffuse surface like a white sheet, light
05:27 16 will be reflected and it'll be scattered in different
05:28 17 directions.

05:28 18 It's like a snowfield on a sunny day. That
05:28 19 same thing happens. So light is reflected back even
05:28 20 though it's not a mirror. And this particular film has
05:28 21 a very high reflectance. It's designed to have -- I
05:28 22 think it's 98 percent.

05:28 23 Q. May I check this limitation off?

05:28 24 A. Check.

05:28 25 Q. The next limitation begins "a planar

05:28 1 photoresponsive layer" and ends with "spectral range."

05:28 2 How is this limitation met in the PG32UQ

05:28 3 representative product?

05:28 4 A. So what we're looking at here is the quantum
05:28 5 dot film that I showed you earlier. That is a planar.
05:28 6 It's a one-dimensional photoresponsive layer. I've
05:28 7 shown you some images that are kind of cross-sectional.
05:28 8 And that's disposed between the optical film stack and
05:29 9 the reflector in the stack up.

05:29 10 Q. Now, the next part of the limitation talks
05:29 11 about "comprising quantum dots."

05:29 12 How is that met by the quantum dot film?

05:29 13 A. Well, as I indicated earlier and showed, the
05:29 14 quantum dots are distributed in this film, uniformly
05:29 15 dispersed, the red and green dots. And that is
05:29 16 transmissive. Light can go through it.

05:29 17 And it -- these quantum dots absorb light in a
05:29 18 certain spectral range, namely blue, and then can emit
05:29 19 different colors like red and green.

05:29 20 And if you look at a spectral diagram, this
05:29 21 is -- I think Dr. Vasylyev talked about light and
05:29 22 having different wavelengths. Blue light excites these
05:29 23 quantum dots into this energy state that can create
05:29 24 light. So that's -- some of that blue light gets
05:30 25 turned into red and green light when the light goes

05:30 1 through it.

05:30 2 So that's what's illustrated on this diagram.

05:30 3 After the light goes through a quantum dot, if you

05:30 4 compare that to before the quantum dots, you'd have a

05:30 5 very tall blue peak. Now you have less blue and you

05:30 6 have some red and green. Not perfectly balanced yet,

05:30 7 but it's showing promise, let's say.

05:30 8 Q. And ultimately, to get white, what colors do

05:30 9 we need?

05:30 10 A. White, generally we want to make red, green,

05:30 11 and blue light, but we want to have the right quantity

05:30 12 of each color so the light doesn't look pinkish or

05:30 13 greenish or bluish. So we need to get that balanced by

05:30 14 the design of the system.

05:30 15 Q. May I check this limitation off?

05:30 16 A. Yes.

05:30 17 Q. The next limitation is "a planar

05:30 18 two-dimensional array of optical elements" and it ends

05:31 19 with "photoresponsive layer."

05:31 20 Did your analysis show that this claim

05:31 21 limitation was met by the PG32UQ representative

05:31 22 product?

05:31 23 A. Yes. It did.

05:31 24 Q. Can we break this apart?

05:31 25 A. Yes.

05:31 1 Q. What is the two-dimensional array of optical
05:31 2 elements?

05:31 3 A. The lens array that we discussed before is an
05:31 4 important optical element in this design, and it's a
05:31 5 planar two-dimensional array.

05:31 6 Q. Now, how are these lenses distributed over an
05:31 7 area of the photoresponsive layer?

05:31 8 A. If we look at the light guide plate area, the
05:31 9 length times width, and we look at the quantum dot
05:31 10 layer, length times width, those optical elements are
05:31 11 distributed over that area. They're a one-to-one
05:31 12 match.

05:31 13 So you have a complete coverage, which is
05:31 14 important for the optics that all the lens elements are
05:32 15 over that area of the quantum dot to improve the
05:32 16 efficiency of the system.

05:32 17 Q. And is that what you're illustrating here?

05:32 18 A. Yes. I guess it's already happened. But I
05:32 19 show the two parts coming together, and they are the
05:32 20 same size as you just demonstrated to the Court.

05:32 21 Q. And how about the rest of this limitation?
05:32 22 How is that met in the representative product?

05:32 23 A. This requires that the space -- there's
05:32 24 light -- let me, I'm sorry, catch up.

05:32 25 The light that's moving between these two

05:32 1 layers, so it's these two layers of the optical film
05:32 2 stack and the reflective surface. This claim element
05:32 3 says there has to be light traveling at a high angle to
05:32 4 the normal to the film.

05:32 5 And the light that's traveling within the
05:32 6 light guide, I've indicated with the blue arrows, is
05:32 7 traveling in that proper direction. And that is done
05:33 8 to spread the light out so we can get the efficiency
05:33 9 that we need for the system. So that satisfies this
05:33 10 claim element.

05:33 11 Q. May I check this limitation off?

05:33 12 A. Yes.

05:33 13 Q. The final limitation of Claim 14 of the '089
05:33 14 patent is: Wherein the thickness of the
05:33 15 photoresponsive layer is less than a minimum thickness
05:33 16 sufficient for absorbing substantially all incident
05:33 17 light in a single pass.

05:33 18 How is this limitation met by the PG32UQ
05:33 19 representative product?

05:33 20 A. The film, the quantum dot film itself is
05:33 21 slightly transparent. Again, this is by design. We
05:33 22 want to have multiple passes through this film. If it
05:34 23 was completely absorbing, we wouldn't get the same
05:34 24 efficiency of the system.

05:34 25 So this is an important element of this claim.

05:34 1 And the images show that that film is partly
05:34 2 transparent, especially when you put it against a
05:34 3 light. And I think we saw that in the court. So this
05:34 4 claim element is met.

05:34 5 Q. May I check this limitation off?

05:34 6 A. Please do.

05:34 7 Q. All right. For dependent Claim 19, how is
05:34 8 dependent Claim 19 met by the PG32UQ product?

05:34 9 A. Claim 19, which depends on Claim 14, which we
05:34 10 just showed, is met by the representative product. The
05:34 11 photoresponsive layer is configured for multiple
05:34 12 transverse light passage.

05:34 13 So this means, as I've described before, the
05:34 14 design of this systems is to have light go through that
05:35 15 film more than once. It could be -- two is enough but
05:35 16 multiple times in order to generate more red and green
05:35 17 light and subtract blue light to get the result that I
05:35 18 showed you in the teardown.

05:35 19 Q. And is that result what you're referring to
05:35 20 when we went from the purple and then you added the
05:35 21 optical film stack and we saw that brilliant bright
05:35 22 white?

05:35 23 A. That's correct. It was a striking difference,
05:35 24 especially those of you sitting in front of the
05:35 25 monitor.

05:35 1 Q. May I check this limitation and dependent
05:35 2 Claim 19 off as infringed?

05:35 3 A. Yes.

05:35 4 Q. Last patent.

05:35 5 Where are we starting with the '318 patent?

05:36 6 A. The '318 we're asserting Claim 3, which is a
05:36 7 dependent claim depending on Claim 1. So we will begin
05:36 8 with Claim 1.

05:36 9 Q. And before we get there, this was another one
05:36 10 of the ones that Mr. Buresh called the light-trapping
05:36 11 patents.

05:36 12 Do you recall that?

05:36 13 A. I think I heard him say those words. Yes.

05:36 14 Q. Again, does the title have any bearing on the
05:36 15 actual limitations in this claim?

05:36 16 A. There's nothing in the claims that refer to
05:36 17 light trapping.

05:36 18 Q. Do we need to waste any more time talking
05:36 19 about titles?

05:36 20 A. I hope not.

05:36 21 Q. All right. Now, the preamble, an optical
05:36 22 cover for light-harvesting devices, we also heard about
05:37 23 that, but does the jury have an order from the Court
05:37 24 saying that the preamble is not limiting?

05:37 25 A. Yes. That is correct.

05:37 1 Q. So no boxes need to be checked there?

05:37 2 A. None.

05:37 3 Q. The first limitation: A layer of -- well,
05:37 4 before that, what are the products at issue for the
05:37 5 '318 patent?

05:37 6 A. I think they're on the next slide. I think it
05:37 7 was five products that are in this category. And
05:37 8 again, the PG32UQ is the representative product, and I
05:37 9 believe it's in JTX-5, if you want to look at the list.

05:37 10 Q. And these are all quantum dot products?

05:37 11 A. These are quantum dot products. Yes.

05:37 12 Q. Now, the first limitation, "a layer of
05:37 13 optically transparent material" and ending in
05:37 14 "transversal light passage."

05:37 15 Did your analysis show that this claim
05:37 16 limitation was met by the PG32UQ representative
05:37 17 product?

05:37 18 A. Yes. I did.

05:37 19 Q. First, what is the layer of optically
05:38 20 transparent material in the representative product?

05:38 21 A. With respect to this claim and this claim
05:38 22 element, I've identified the light guide plate as the
05:38 23 layer of optically transparent material.

05:38 24 Q. And what are the broad area input and output
05:38 25 surfaces in the representative product?

05:38 1 A. I've color-coded these two surfaces. The back
05:38 2 surface is a broad area light input surface. All the
05:38 3 light that's reflected off that back reflector, which
05:38 4 if you recall, I said is about 50 percent of the light,
05:38 5 will input that light edge from the back, and the
05:38 6 opposing broad area light output surface is the lens
05:38 7 surface, which I've colored in kind of a turquoise
05:38 8 color.

05:38 9 Q. Now, I want you -- to hold you up right there.
05:38 10 Because I thought these were edge-lit so the edge is at
05:38 11 the bottom light monitors. Why is it that there's a
05:39 12 broad area input surface in the back as well?

05:39 13 A. There can be more than one input surface. The
05:39 14 claim is a comprising claim. The -- what defines an
05:39 15 input surface is where light travels. So certainly
05:39 16 light enters the edge of the light guide plate. That
05:39 17 could be called an input surface. But the light -- a
05:39 18 significant portion of the light enters that back
05:39 19 surface that I drew around with a yellow box. So that
05:39 20 is clearly an input surface for this system.

05:39 21 Q. So the word "comprising" here allows us to
05:39 22 also have infringement on systems that have that edge
05:39 23 input as well?

05:39 24 A. That's correct. It's an additional element,
05:39 25 but this is -- right, this is a comprising claim.

05:39 1 Q. Now, about that requirement for a broad area
05:39 2 input surface, what would happen if the light guide
05:40 3 plate in a hypothetical system didn't have a broad area
05:40 4 input surface on the backside?

05:40 5 A. Well, I think if you -- it would -- the light
05:40 6 would be lost. So it wouldn't be a workable system.

05:40 7 Q. And what does the fact that there's a rear
05:40 8 reflector in the accused ASUSTeK products tell us about
05:40 9 whether there is, in fact, a broad area input surface
05:40 10 in these products?

05:40 11 A. Well, if no light was going backwards by some
05:40 12 magic, you wouldn't need a reflector. If all the light
05:40 13 went forward, then you wouldn't have a need for that
05:40 14 reflector. The fact there is a reflector and the fact
05:40 15 we've made measurements that a significant portion of
05:40 16 light is coming back from that reflector indicates that
05:40 17 it is indeed an input surface.

05:40 18 Q. All right. Moving on to the rest of this
05:40 19 limitation -- oh, excuse me.

05:40 20 How is this ultimately configured for
05:40 21 substantially unimpeded transversal light passage?

05:41 22 A. Because the light guide plate is made from a
05:41 23 high-quality plastic, there is unimpeded transversal
05:41 24 light passage through that film.

05:41 25 Q. May I check this limitation off?

05:41 1 A. Yes.

05:41 2 Q. The next limitation begins "said layer" and
05:41 3 ends "said surfaces." It's a bit longer.

05:41 4 How is this limitation infringed by the
05:41 5 representative PG32UQ products?

05:41 6 A. Again, we've identified the light-deflecting
05:41 7 elements as those microcavities on the -- on the
05:41 8 prevailing plane, on that light input plane. And the
05:41 9 aperture, meaning the area of those microcavities,
05:41 10 compared to the area of the light guide plate, it's a
05:41 11 very small fraction.

05:41 12 Q. And so is there more of the flat surface than
05:42 13 there is of the cavity?

05:42 14 A. Much more of the flat surfaces. I think you
05:42 15 can see from the image on the right, if you just kind
05:42 16 of roughly scale it in your head, there's a lot more
05:42 17 planar parts than there are microcavity parts.

05:42 18 Q. May I check this limitation off?

05:42 19 A. Yes.

05:42 20 Q. The next limitation begins "said light input
05:42 21 surface" and ends with "total internal reflection."

05:42 22 How did you find that this limitation was met
05:42 23 by the PG32UQ products?

05:42 24 A. I show that here in this diagram. The light
05:42 25 input surface is that rear surface that we've been

05:42 1 discussing, and a significant portion is planar without
05:42 2 microstructures. And the concept of total internal
05:43 3 reflection, again using the Court's construction, shows
05:43 4 that light can hit that surface at the right angle that
05:43 5 will be transmitted, if you will.

05:43 6 Q. And we observed this in the demonstration?

05:43 7 A. Yes. We did effectively.

05:43 8 Q. May I check this off?

05:43 9 A. Yes.

05:43 10 Q. The last limitation of Claim 1 of the '318
05:43 11 patent begins "wherein each of said light-deflecting
05:43 12 elements" and ends with "total internal reflection."

05:43 13 How did you find that the PG32UQ product met
05:43 14 this limitation?

05:43 15 A. For this limitation, we have to look at the
05:43 16 details of how the light interacts with those
05:43 17 microcavity structures, those annular structures that I
05:43 18 illustrated. And as light flows towards those little
05:43 19 microstructures, depending on their angle and position,
05:44 20 again, the light can go to the right, to the left, or
05:44 21 it can continue through total internal reflection
05:44 22 upwards or downwards depending how the light is
05:44 23 flowing. And that angle is large compared to the
05:44 24 normal.

05:44 25 Q. May I check this limitation off?

05:44 1 A. You may.

05:44 2 Q. All right. Our last limitation with these
05:44 3 boards.

05:44 4 It's dependent Claim 3 of the '318 patent.
05:44 5 How did you find the PG32UQ product infringed Claim 3
05:44 6 of the '318 patent?

05:44 7 A. This one's pretty straightforward hopefully by
05:44 8 now. These are microscopic cavities that you can't see
05:44 9 without a microscope. That's kind of the definition of
05:44 10 "microscopic." And so this claim element is met.

05:44 11 Q. And so does that mean that Claim 3 is
05:45 12 infringed?

05:45 13 A. That means that Claim 3 is infringed by the
05:45 14 accused products represented by the PG32UQ.

05:45 15 Q. Are we finally done with the claim boards?

05:45 16 A. I believe we are.

05:45 17 Q. Now, we went through a lot of claims, a lot of
05:45 18 elements. At all during opening or during the cross of
05:45 19 Dr. Vasylyev, did you hear Mr. Buresh, ASUSTeK's
05:45 20 counsel, mention a single claim limitation that they
05:45 21 think's not infringed?

05:45 22 A. I didn't hear him talk about any claim
05:45 23 limitations.

05:45 24 Q. We might hear some later, but we'll see.

05:45 25 Titles. That's not claim limitations, right?

05:45 1 A. Right.

05:45 2 Q. Right.

05:45 3 All right. We talked about the claims. Can
05:45 4 we now talk about ASUSTeK's acts of infringement?

05:46 5 A. Sure.

05:46 6 Q. Why do we need to talk about ASUSTeK's acts of
05:46 7 infringement even after you proved all these
05:46 8 monitors --

05:46 9 THE COURT: Counsel?

05:46 10 MR. REICH: Yes, Your Honor.

05:46 11 (Bench conference.)

05:46 12 THE COURT: How much longer do you have?

05:46 13 MR. REICH: I may have maybe 25 to
05:46 14 30 minutes. If we want to break now, it's totally fine
05:46 15 by us.

05:46 16 MR. BURESH: You want to keep going after
05:46 17 the break or are we --

05:46 18 THE COURT: No. We're done for the day.

05:46 19 (Bench conference concludes.)

05:46 20 THE COURT: Ladies and gentleman, I asked
05:46 21 the lawyers what we should do, and they both said they
05:46 22 wanted to go another two hours.

23 (Laughter.)

05:46 24 Not true.

05:46 25 I suggested that we break for the

05:46 1 afternoon; they thought that was a great idea. So if
05:47 2 you all would be kind enough to be back here at
05:47 3 8:15ish, 8:15, 8:20, we'll get started at 8:30
05:47 4 tomorrow.

05:47 5 Give me one second.

05:47 6 For your planning purposes, as I told
05:47 7 you -- I don't think this needs to be on the record.
05:47 8 I'll put it on the record if the lawyers want me to
05:47 9 after they hear it.

05:47 10 I'm the only district judge in the
05:47 11 building, which means I wear more than one hat. On
05:47 12 Wednesday, I have to do sentencings because I also have
05:47 13 a criminal docket. And so we're -- on Wednesday, if
05:47 14 you all would get here, for your planning purposes, at
05:47 15 10:00, I'll get started as soon after 10:00 as we can,
05:47 16 but I don't want y'all waiting any longer than you have
05:47 17 to.

05:47 18 So -- but also, you can't really hurry up
05:47 19 sentencings. So I'm balancing those two things.

05:48 20 So if you all will be here -- plan on
05:48 21 being here Wednesday at 10:00, and if tomorrow I forget
05:48 22 that, I really mean 10:00. So if tomorrow I screw up,
05:48 23 because I always say be back at 8:30, plan on 10:00 on
05:48 24 Wednesday morning.

05:48 25 Please -- please remember my

05:48 1 instructions. Please do not post anything. Please do
05:48 2 not do any research. And when you get home, please
05:48 3 don't discuss -- you obviously can say where you were,
05:48 4 but please don't discuss any of the facts that you
05:48 5 heard today with anyone outside at all.

05:48 6 Thank you.

05:48 7 THE BAILIFF: All rise.

05:48 8 (Jury exited the courtroom.)

05:49 9 (Off-the-record discussion.)

05:53 10 (Hearing adjourned.)

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1 UNITED STATES DISTRICT COURT)
2 WESTERN DISTRICT OF TEXAS)
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5 I, Kristie M. Davis, Official Court
6 Reporter for the United States District Court, Western
7 District of Texas, do certify that the foregoing is a
8 correct transcript from the record of proceedings in
9 the above-entitled matter.

10 I certify that the transcript fees and
11 format comply with those prescribed by the Court and
12 Judicial Conference of the United States.

13 Certified to by me this 3rd day of
14 October 2024.

15
16 /s/ Kristie M. Davis
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IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

SVV TECHNOLOGY *
INNOVATIONS, INC. *
* September 24, 2024
VS. *
* CIVIL ACTION NO. 6:22-CV-311
ASUSTEK COMPUTER INC. *

BEFORE THE HONORABLE ALAN D ALBRIGHT
JURY TRIAL PROCEEDINGS
Volume 2 of 4

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08:33 1 (Hearing begins.)

08:33 2 THE BAILIFF: All rise.

08:33 3 THE COURT: Thank you. You may be
08:33 4 seated.

08:33 5 I'm happy to take up any issues.

08:33 6 MR. SIEGMUND: Good morning, Your Honor.

08:33 7 The first thing is, is the parties
08:33 8 reached a stipulation. So we just need to read it into
08:33 9 the record, if that's all right with the Court.

08:33 10 THE COURT: Is it something the jury
08:33 11 needs to hear?

08:33 12 MR. SIEGMUND: This one is, which I'll
08:33 13 hand to the Court in just a second. This is also
08:33 14 agreed. And I believe the parties wanted you to read
08:33 15 that after Mr. Credelle finishes.

08:33 16 MR. MCCARTY: I think after the -- we
08:33 17 have some depositions. So just after the depositions,
08:33 18 which will come right after Dr. Credelle.

08:33 19 THE COURT: You just let me know when.

08:33 20 MR. SIEGMUND: Okay. So here's the
08:34 21 stipulation, Your Honor: ASUSTeK Computer
08:34 22 Incorporated, ASUSTeK hereby stipulates for purpose --
08:34 23 purposes of this case only that ASUSTeK is liable for
08:34 24 the sale, offers for sale, and importation of the
08:34 25 accused products in the United States by its U.S.

08:34 1 subsidiary ASUS Computer International and to the
08:34 2 extent necessary, its subsidiary, ASUSTeK Global Pte.
08:34 3 Limited.

08:34 4 ASUSTeK thus waives the ability to
08:34 5 challenge vicarious liability in this case including in
08:34 6 any subsequent appeal.

08:34 7 ASUSTeK makes this stipulation without
08:34 8 waiving its ability to challenge vicarious liability,
08:34 9 including but not limited to alter ego theories of
08:34 10 liability for any purpose in any other case or context,
08:34 11 including without limitation in other legal
08:34 12 proceedings, cases, and litigations.

08:34 13 And then if I could approach, I'll hand
08:34 14 this to the Court.

08:34 15 THE COURT: Sure.

08:35 16 What else do we have to take up?

08:35 17 MR. MCCARTY: We have one little
08:35 18 evidentiary issue that my colleague Bjorn Blomquist is
08:35 19 going to do, and it's an agreed thing having to do with
08:35 20 one of the exhibits or a couple of the exhibits
08:35 21 yesterday.

08:35 22 THE COURT: Okay.

08:35 23 MR. BLOMQUIST: Good morning, Your Honor.
08:35 24 Bjorn Blomquist on behalf of the plaintiff SVV.

08:35 25 First, Your Honor, this is a correction

08:35 1 from yesterday's transcript. I just want to make it on
08:35 2 the record.

08:35 3 At transcript 138:5 to 15 yesterday,
08:35 4 there was inadvertently a reference to PTX-130. It was
08:35 5 meant to be PTX-30. It was eventually admitted as the
08:35 6 incorrect exhibit. So the plaintiffs move to admit
08:35 7 PX-30 into the record.

08:35 8 MR. BURESH: No objection.

08:35 9 THE COURT: Admitted.

08:35 10 MR. BLOMQUIST: Second thing, Your Honor,
08:35 11 very briefly is four exhibits that the parties have
08:35 12 agreed to admit on the record prior to the depositions
08:35 13 reading today. Those exhibits are PTX-061, PTX-025,
08:35 14 PTX-026, and PTX-027. The plaintiff moves those
08:36 15 exhibits into the record.

08:36 16 MR. BURESH: No objection.

08:36 17 THE COURT: Admitted.

18 MR. BLOMQUIST: Thank you, Your Honor.

19 THE REPORTER: Counsel, do you want 130
20 unadmitted?

21 MR. BLOMQUIST: 30 admitted.

08:36 22 THE REPORTER: 130. I'm sorry, 130.

08:36 23 MR. BLOMQUIST: Yes, please. Yes. It's
08:36 24 a substitution. Thank you.

08:36 25 THE COURT: Anything else to take up?

08:36 1 MR. MCCARTY: Not from the plaintiff,
08:36 2 Your Honor.

08:36 3 MR. BURESH: Nothing, Your Honor.

08:36 4 THE COURT: Is the witness ready to go?

08:36 5 MR. MCCARTY: Yes.

08:36 6 THE COURT: Okay.

08:36 7 (Off-the-record discussion.)

08:37 8 (Recess taken.)

08:37 9 THE BAILIFF: All rise.

08:37 10 THE COURT: Please remain standing for
08:37 11 the jury.

08:37 12 (Jury entered the courtroom.)

08:38 13 THE COURT: You may be seated.
08:38 14 Counsel?

08:38 15 MR. REICH: Your Honor, we'll resume
08:38 16 Mr. Credelle.

08:38 17 THE COURT: Please.

08:38 18 DIRECT EXAMINATION CONTINUED

08:38 19 BY MR. REICH:

08:38 20 Q. Good morning, Mr. Credelle.

08:38 21 A. Good morning.

08:38 22 Q. Did you sleep well?

08:38 23 A. Yes.

08:38 24 Q. Now, where we left off yesterday, we showed --
08:38 25 you showed that ASUS' monitors infringe each of the

08:38 1 asserted patents.

08:38 2 Can we now talk about ASUS' acts of
08:38 3 infringement?

08:38 4 A. Yes.

08:38 5 Q. Why do we need to talk about ASUSTeK's acts of
08:38 6 infringement if we've already shown that all the
08:38 7 monitors that are accused infringe the claims?

08:38 8 A. In addition to showing that they -- products
08:39 9 infringe the claims, ASUS has to perform certain acts
08:39 10 of infringement, such as offering for sale, selling, or
08:39 11 importing these products into the United States.

08:39 12 Q. And so what acts of infringement did you find
08:39 13 that ASUSTeK is liable for?

08:39 14 A. Indeed these products are for sale. They
08:39 15 import them into the United States and they are sold.

08:39 16 Q. What are you showing here on this slide?

08:39 17 A. This is an example from ASUS' website in the
08:39 18 United States. I think it's ASUS.com. Excuse me.

08:39 19 Q. And is this an example of an offer for sale?

08:39 20 A. Yes. This is the same monitor that I used in
08:39 21 the teardown, the gaming monitor. It is offered for
08:39 22 sale. On their website it is available generally for
08:39 23 \$999.

08:39 24 Q. And there's also descriptions of all of the
08:39 25 specifications of this monitor on the website?

08:40 1 A. Yes. That's quite detailed about the benefits
08:40 2 of this particular monitor to the user.

08:40 3 Q. Can you turn your -- to your -- PTX-61 in your
08:40 4 binder?

08:40 5 A. Okay.

08:40 6 Q. What is this exhibit?

08:40 7 A. This is an excerpt from the -- a figure that
08:40 8 shows the sales data for various models of ASUS
08:40 9 products in the United States when they sold them,
08:40 10 their descriptions, that kind of information.

08:40 11 MR. REICH: Your Honor, we move to admit
08:40 12 PTX-61.

08:40 13 MR. BURESH: No objection.

08:40 14 THE COURT: Admitted.

08:40 15 BY MR. REICH:

08:40 16 Q. Are you showing some of the sales data from
08:40 17 PTX-61 on the screen?

08:40 18 A. Yes. As I said, it's a very large
08:40 19 spreadsheet, but this shows just an excerpt. And for
08:41 20 example, it shows the first sale date in the United
08:41 21 States, how many were sold, some information on
08:41 22 revenue, and then the model name, most importantly.

08:41 23 Q. And does the actual sales exhibit have rows
08:41 24 and rows and columns?

08:41 25 A. This is a quite large spreadsheet, as you can

08:41 1 imagine.

08:41 2 Q. Now, are you the one who's going to be talking
08:41 3 about all those rows and columns that cover the
08:41 4 4.2 million accused products that were sold?

08:41 5 A. No. That's -- Dr. Farber will handle that in
08:41 6 his report.

08:41 7 Q. Now, specifically, what ASUSTeK company does
08:41 8 this sales data come from?

08:41 9 A. I'm sorry. Could you repeat?

08:41 10 Q. What ASUS company does this sales spreadsheet
08:41 11 that we're looking at come from?

08:41 12 A. This spreadsheet is for the U.S. subsidiary,
08:41 13 which I believe is called ASUSTeK Computer
08:41 14 International.

08:41 15 Q. So just so I'm clear, the International entity
08:42 16 is actually the entity in the U.S. and the Inc. entity
08:42 17 is the Taiwanese entity; is that right?

08:42 18 A. Yes. I suppose, from Taiwan's point of view,
08:42 19 we are international so they elected to call this
08:42 20 International, but it is the U.S. sales arm.

08:42 21 Q. And so does this reflect sales and
08:42 22 importations in the United States?

08:42 23 A. It does.

08:42 24 Q. Can you turn to PTX-47 in your binder?

08:42 25 Are you familiar with this document?

08:42 1 A. Yes. This is an annual report for ASUSTeK
08:42 2 Computer Incorporated from 2021.

08:42 3 MR. REICH: Your Honor, we move to admit
08:42 4 PTX-47.

08:42 5 MR. BURESH: No objection.

08:42 6 THE COURT: Admitted.

08:42 7 BY MR. REICH:

08:42 8 Q. Now, what are you showing on this slide with
08:42 9 respect to PTX-47?

08:42 10 A. From this report, it shows the ownership of
08:43 11 ASUSTeK Computer International, the U.S. sales arm.
08:43 12 And it is indeed a 100-percent-owned entity for ASUSTeK
08:43 13 Computer Incorporated.

08:43 14 Q. Okay. When the accused products are sold in
08:43 15 the U.S., are they labeled as ASUSTeK Computer Inc.
08:43 16 products, or are they labeled as ASUSTeK Computer
08:43 17 International products?

08:43 18 A. ASUSTeK Computer Incorporated, the Taiwan
08:43 19 entity.

08:43 20 Q. And is that what you're showing here on the
08:43 21 screen from the label on the back of the PG32UQ
08:43 22 product?

08:43 23 A. Exactly. This is -- this type of label is on
08:43 24 the back of every product, and it does identify ASUSTeK
08:43 25 Computer Incorporated, from Taiwan, as the

08:43 1 manufacturer; and it gives some other data about
08:43 2 manufacturing date.

08:43 3 Q. And what have you indicated in the red box
08:43 4 regarding the FCC rules?

08:43 5 A. Any product that's to be sold into the United
08:44 6 States must pass the FCC rules relating to electronic
08:44 7 admission -- emission from the product, and this device
08:44 8 complies with those rules. Meaning it is designed to
08:44 9 be sold in the United States.

08:44 10 Q. Okay. And based on this evidence, can you
08:44 11 confirm again to me what your conclusions were with
08:44 12 respect to ASUSTeK Computer Incorporated's acts of
08:44 13 direct infringement?

08:44 14 A. I concluded that ASUS does perform acts of
08:44 15 infringement by offering for sale, selling, and
08:44 16 importing the accused monitors into the United States.

08:44 17 Q. Now, beyond direct infringement, which we
08:44 18 talked about, do you understand there's another type of
08:44 19 infringement called indirect infringement?

08:44 20 A. Yes. That's my understanding.

08:44 21 Q. Now, do you need to have any notice or
08:44 22 knowledge of the patent for that direct infringement
08:44 23 bucket we talked about?

08:44 24 A. Actually, you do not.

08:44 25 Q. But for this indirect infringement bucket, do

08:45 1 you understand that ASUS' intent and knowledge are
08:45 2 relevant?

08:45 3 A. Yes.

08:45 4 Q. Are you the person to opine as to intent and
08:45 5 knowledge?

08:45 6 A. No. That's for you, the jury, to decide.

08:45 7 Q. Well, can you help us understand some of the
08:45 8 technical issues that are relevant to notice and
08:45 9 intent?

08:45 10 A. The -- I'm sorry. Can you repeat the
08:45 11 question?

08:45 12 Q. Are you going to be able to help us understand
08:45 13 some of the technical issues that are relevant to
08:45 14 notice and intent?

08:45 15 A. Yes.

08:45 16 Q. Now, I think we saw this before. Are you
08:45 17 familiar with the notice letters in this case?

08:45 18 A. Yes.

08:45 19 Q. Taking a look at the notice letter, PTX-16,
08:45 20 from your perspective, could a technical person of
08:45 21 skill in the art, like yourself, have understood and
08:45 22 been on notice of infringement based on the details
08:45 23 that SVV provided in this letter to ASUSTeK?

08:46 24 A. Yes. I think it's quite straightforward.
08:46 25 We've seen this document before. It lists the patents

08:46 1 that SVV has, and it lists two or three products that
08:46 2 are shown or claimed to be infringing. It would be
08:46 3 quite straightforward for an ASUSTeK engineer to look
08:46 4 at those products and look at the claims of these
08:46 5 patents and see if it infringes.

08:46 6 Q. Would that be an analysis similar to what you
08:46 7 did with these claim boards?

08:46 8 A. It would work the same way. They would take
08:46 9 apart the monitor. They actually have access to all
08:46 10 the details beyond just taking apart the monitor. But
08:46 11 that would be the most straightforward way to do it.

08:46 12 Q. Now, as part of your analysis, did you also
08:46 13 look at ASUSTeK's written discovery responses in this
08:46 14 case?

08:46 15 A. Yes. I did.

08:46 16 Q. Can you turn to Tab PTX-52 in your binder?

08:46 17 A. Okay. I'm there.

08:47 18 Q. Are you familiar with this document?

08:47 19 A. Yes.

08:47 20 Q. What is PTX-52?

08:47 21 A. This is a response to SVV questions, requests
08:47 22 for admission, which is basically asking ASUSTeK to
08:47 23 confirm or deny certain facts.

08:47 24 MR. REICH: Your Honor, we move to admit
08:47 25 PTX-52.

08:47 1 MR. BURESH: No objection.

08:47 2 THE COURT: Admitted.

08:47 3 BY MR. REICH:

08:47 4 Q. What are you showing with respect to ASUSTeK's
08:47 5 response to Request for Admission 6?

08:47 6 A. This is No. 6, did they receive a copy of the
08:47 7 letter we just looked at?

08:47 8 And their answer is: Yes. We received that
08:47 9 letter.

08:47 10 Q. And what are you showing on this slide with
08:47 11 respect to Request for Admission 8?

08:47 12 A. This is asking if they are aware of these
08:48 13 patents on February 25th, 2021.

08:48 14 And they said: Yes. We admit that.

08:48 15 Q. Now, ultimately, who is responsible for using
08:48 16 the evidence like this to determine whether ASUSTeK was
08:48 17 aware of and intended to infringe SVV's patents?

08:48 18 A. Again, that's for the jury to decide.

08:48 19 Q. Is it time to move to the final topic that
08:48 20 you'll be addressing today?

08:48 21 A. Yes.

08:48 22 Q. Why are you discussing technical value and
08:48 23 damages when you already mentioned that Mr. Farber --
08:48 24 Dr. Farber is coming to explain the sales?

08:48 25 A. Dr. Farber is not a technical person, and so

08:48 1 he's asked me to comment on the value of these patents
08:48 2 to ASUS monitors for use in his analysis.

08:48 3 Q. What are the technical value and benefits
08:48 4 associated with SVV's patents?

08:48 5 A. SVV's patents, as we heard yesterday, are all
08:49 6 about efficient management of light, how light flows
08:49 7 from a source to the screen in the most efficient way;
08:49 8 and because of that design, the product is improved.

08:49 9 The product is brighter, if you use the same
08:49 10 components. It has better color and whiteness,
08:49 11 especially those that use the quantum dots that we
08:49 12 discussed. And it has a better natural viewing angle
08:49 13 by the management of the flow of light, again, from
08:49 14 these LEDs at the bottom of the screen throughout the
08:49 15 whole area, into a comfortable use so you can enjoy the
08:49 16 monitor.

08:49 17 Q. And while these benefits can make the monitor
08:49 18 better, as you described, can they -- benefits also
08:49 19 manifest in other ways?

08:49 20 A. Yes. For example, you might be able to make
08:49 21 the brightness 20 percent higher because the efficiency
08:50 22 is better, but if you don't need 20 percent brightness
08:50 23 higher for your application, you can actually reduce
08:50 24 the cost of the monitor by reducing the cost of some of
08:50 25 the components.

08:50 1 For example, fewer LEDs, fewer optical sheets,
08:50 2 a power supply that doesn't have to be as large to
08:50 3 supply power to those LEDs.

08:50 4 So this could be manifested as a cost savings
08:50 5 for a monitor to achieve basically the same
08:50 6 performance, or you can have a premium product with the
08:50 7 higher -- higher-quality --

08:50 8 Q. Now, are you --

08:50 9 A. -- specs.

08:50 10 Q. Excuse me.

08:50 11 Are you responsible for quantifying the value
08:50 12 of these benefits to ASUSTeK's products?

08:50 13 A. No. Again, that's -- that's a job for
08:50 14 Dr. Farber.

08:50 15 Q. Now, before we finish up, I just wanted to go
08:51 16 back a little bit to some of the key takeaways from
08:51 17 yesterday.

08:51 18 What matters for determining infringement?

08:51 19 A. The claims, the claims, the claims.

08:51 20 Q. And did you go through all the claims?

08:51 21 A. I did.

08:51 22 Q. Now, are there certain Court constructions
08:51 23 that everyone needs to follow when applying the claims?

08:51 24 A. Yes. There are.

08:51 25 Q. Now, otherwise, if there's no construction

08:51 1 that the jury has in their binder, how are the claims
08:51 2 supposed to be construed?

08:51 3 A. The claims are supposed to be construed by
08:52 4 their plain and ordinary meaning if there's no Court
08:52 5 construction.

08:52 6 Q. What does this concept of this idea of plain
08:52 7 meaning mean?

08:52 8 A. It means that a person of skill in the art,
08:52 9 someone who is familiar with backlighting systems and
08:52 10 displays, for example, would understand that a
08:52 11 component such as -- for example, quantum dots, there's
08:52 12 a plain and ordinary meaning for a quantum dot.

08:52 13 Quantum dots are used widely in industry in
08:52 14 millions of products to change blue light into red and
08:52 15 green light. You see these advertised in Best Buy when
08:52 16 you go look at TVs these days.

08:52 17 That's the plain and ordinary meaning for
08:52 18 quantum dots, even though they can have other
08:52 19 applications. So that's the meaning that I used in my
08:52 20 analysis.

08:52 21 Q. What is the role of the descriptions and the
08:53 22 figures in the patents, or patents generally?

08:53 23 A. Generally they're examples of how the
08:53 24 invention works. I mentioned this is about light
08:53 25 management. Efficient light management from a source

08:53 1 to a destination, if you will. The figures and
08:53 2 descriptions are to make that clear to a person of
08:53 3 skill in the art so they understand the invention.

08:53 4 Q. So they're examples?

08:53 5 A. They're examples.

08:53 6 Q. And is any given figure a limitation on the
08:53 7 claims?

08:53 8 A. None of them are.

08:53 9 Q. Are you required to have a figure in your
08:53 10 patent for every possible implementation or
08:53 11 application?

08:53 12 A. No. I think you could imagine that would make
08:53 13 patents quite big. Once the concept of the
08:53 14 invention -- in this case, the light management of the
08:53 15 optical system -- is disclosed and described, you don't
08:54 16 have to have figures for every single application.

08:54 17 Q. Is the title a limitation on the patent, the
08:54 18 claims?

08:54 19 A. The title is not a limitation on these claims.

08:54 20 Q. Now, you'll agree that these patents have
08:54 21 titles, right, and they're descriptive?

08:54 22 A. Yes.

08:54 23 Q. And there are certainly examples, you would
08:54 24 agree, in some of these patents related to solar
08:54 25 applications. That's fair; we're not disputing that,

08:54 1 right?

08:54 2 A. Yes. I don't dispute that. It's very clear.

08:54 3 Q. But as an optics guy, where LCD displays are
08:54 4 100 percent in your lane, what is the key understanding
08:54 5 that a person of skill in the art with experience in
08:54 6 the lighting optics field and industry knows when
08:54 7 reading the SVV patents in these examples?

08:54 8 A. Yeah. It is a lane I've traveled for almost
08:54 9 five decades. So I have a clear understanding of the
08:54 10 optics of these systems.

08:54 11 A person of skill in the art would look at the
08:54 12 patents, look at the optical system, how it manages
08:55 13 light using the features I described such as lenses and
08:55 14 deflecting elements and total internal reflection to
08:55 15 achieve a better control of that light going from a
08:55 16 source to the end, which in some cases is solar, but in
08:55 17 other, equally, it applies to backlight, because light
08:55 18 actually can go both ways.

08:55 19 Light is not -- you can have light coming down
08:55 20 and in or in and up. The optics are the same.

08:55 21 Q. And applying these rules, your understanding,
08:55 22 all the work we did, can you give the jury kind of
08:55 23 final summary of your conclusions in this case?

08:55 24 A. Sure. As I said at the beginning, and I hope
08:55 25 now I've shown you that this is indeed the facts, that

08:56 1 ASUS infringes Claims 1 and 21 of the '342 patent; ASUS
08:56 2 infringes Claims 1 and 7 of the '562 patent; ASUS
08:56 3 infringes Claim 19 of the '089 patent; and, finally,
08:56 4 ASUS infringes Claim 3 of the '318 patent.

08:56 5 MR. REICH: Your Honor, SVV marks as
08:56 6 demonstratives these claim boards Demonstrative
08:56 7 PDX-3 -- 1, 2, 3, 4, and 5, as demonstratives. And
08:56 8 we'll put the stickers on them afterwards.

08:56 9 We'll pass the witness.

08:56 10 THE COURT: Thank you.

08:56 11 CROSS-EXAMINATION

08:56 12 BY MR. BURESH:

08:58 13 Q. Good morning, sir.

08:58 14 A. Good morning.

08:58 15 Q. How are you?

08:58 16 A. I'm fine.

08:58 17 Q. Okay. Now, let me start here. You do quite a
08:58 18 bit of testifying work as an expert witness, correct?

08:58 19 A. I don't know what you define as "quite a bit."
08:58 20 I have done two or three trials.

08:58 21 Q. Okay. And I believe there's a CV in your
08:58 22 binder --

08:58 23 A. Yes.

08:58 24 Q. -- if you need to review it.

08:58 25 As I reviewed your CV, going back to 2019, so

08:58 1 five years, you've been engaged on well more than 20
08:58 2 litigation matters, fair?

08:58 3 A. I haven't counted them, but I trust your math.

08:58 4 Q. Okay. And as you've said, you have testified
08:59 5 in multiple trials through that time?

08:59 6 A. Yes. When it reaches this stage, I testify.
08:59 7 It doesn't usually get all the way to trial.

08:59 8 Q. When's the last time you testified in trial?

08:59 9 A. I testified in June of this year.

08:59 10 Q. So this is kind of old hat for you?

08:59 11 A. They're always different, but I don't know if
08:59 12 I'd say old hat, but they're -- I'm familiar with the
08:59 13 process.

08:59 14 Q. Okay. And again, looking at your CV if you
08:59 15 need to, I couldn't find any nonlitigation consulting
08:59 16 that you've done since 2018; is that correct?

08:59 17 A. In 2018 I moved out of the Bay Area, so the
08:59 18 Silicon Valley, if you will, to central Oregon that
08:59 19 made it -- excuse me.

08:59 20 Q. And feel free to take a drink whenever you
08:59 21 need to.

08:59 22 A. It just didn't make it convenient to do
09:00 23 business consulting and technical consulting any
09:00 24 longer. And I was entering my semiretirement age's
09:00 25 era, so I decided to just focus just on the patent

09:00 1 consulting since then.

09:00 2 Q. Okay. So since 2018, you've only been doing
09:00 3 expert witness consulting?

09:00 4 A. That's correct.

09:00 5 Q. Now, for this particular matter, you're being
09:00 6 compensated at \$500 an hour; is that correct?

09:00 7 A. That's correct.

09:00 8 Q. And who's paying that?

09:00 9 A. The Katz law firm.

09:00 10 Q. That represents --

09:00 11 A. That represents SVV.

09:00 12 Q. Okay. So I want to be very clear here. I'm
09:00 13 not asking you how much money you make. That would be
09:00 14 impolite.

09:00 15 But I do want to know as a percentage of your
09:00 16 income, your wages over the last year, what percentage
09:01 17 of your wages is earned through expert witness work?

09:01 18 A. Essentially all of it in the last year has
09:01 19 been consulting on patents, on IPRs, on writing
09:01 20 reports, and occasionally testifying.

09:01 21 Q. Okay. So this is kind of your main gig?

09:01 22 A. It's my main retirement gig, if you will.

09:01 23 Q. And you were hired in this case by the Katz
09:01 24 law firm that represents the plaintiff?

09:01 25 A. Yes. That's correct.

09:01 1 Q. Is it normal for you to be hired by lawyers?

09:01 2 A. That's -- yes. That's, I think, all the --

09:01 3 always the case. I'm approached by a law firm

09:01 4 representing a client looking for advice on patents,

09:02 5 and I review the case. And if it looks interesting,

09:02 6 and defensible, I agree to join -- you know, to be an

09:02 7 expert for that case.

09:02 8 Q. Okay. So having done this work for a while

09:02 9 now, I just want to ask you some simple questions about

09:02 10 the process that you go through, if that's all right.

09:02 11 A. Sure.

09:02 12 Q. Is infringement analysis like the one you were

09:02 13 hired to conduct, it's a two-step process, correct?

09:02 14 A. Yes. There's multiple steps, but at least

09:02 15 there's two steps. I don't know which ones you're

09:02 16 referring to.

09:02 17 Q. I'm talking high level.

09:02 18 A. High level. Okay.

09:03 19 Q. The first step is to understand the patents

09:03 20 and the claims in the patent?

09:03 21 A. Correct.

09:03 22 Q. And you're supposed to do that Step 1 without

09:03 23 consideration of the accused products that you're being

09:03 24 asked to look at?

09:03 25 A. Actually, that's my normal process, and

09:03 1 sometimes I do that before I'm even retained.

09:03 2 Q. Fair enough. And I'm trying to ask narrow
09:03 3 questions. So --

09:03 4 A. Okay.

09:03 5 Q. -- I know you'd like to add some stuff to it,
09:03 6 but your attorneys will get another chance.

09:03 7 MR. REICH: Objection, Your Honor.

09:03 8 THE COURT: Sustained.

09:03 9 BY MR. BURESH:

09:03 10 Q. Okay. So let's get back to the process.

09:03 11 A. Sure.

09:03 12 Q. The first step, understand the patent claims?

09:03 13 A. Check.

09:03 14 Q. Okay. And then the second step would be to
09:03 15 review the accused products in view of your
09:03 16 understanding?

09:03 17 A. That's fair.

09:03 18 Q. Okay. Is it your understanding that in that
09:04 19 first step, considering and understanding the patent
09:04 20 claims, that that understanding of the terms is found
09:04 21 in view of the patent's specification, file history,
09:04 22 and the understanding of a person of ordinary skill in
09:04 23 the art?

09:04 24 A. I would say that's accurate.

09:04 25 Q. Okay. Is it your understanding that the role

09:04 1 of the specification of a patent, the parts before the
09:04 2 claims, is to describe and enable the invention?

09:04 3 A. It -- it needs to enable the invention. It
09:04 4 needs to describe the -- the aspects of the invention.

09:04 5 Q. So let me ask this again.

09:05 6 The role of the specification in Step 1 is to
09:05 7 describe and enable the invention?

09:05 8 A. Yes. It does that at least.

09:05 9 Q. Okay. In turn, the claims cannot be of a
09:05 10 broader scope than the invention that is set forth in
09:05 11 the specification.

09:05 12 Is that your understanding in Step 1?

09:05 13 A. That's my understanding of the patent law.

09:05 14 Q. Okay. In fact, care must be taken in Step 1
09:05 15 lest word-by-word application removed from the context
09:05 16 of the patent would lead to an overall result that
09:05 17 departs significantly from the patented invention?

09:05 18 A. I'm not sure I followed all of that.

09:05 19 Q. Okay.

09:05 20 A. Maybe you can break it down.

09:05 21 Q. Sure.

09:05 22 I'm going to give you a sentence and ask you
09:06 23 if you agree with this sentence. Okay?

09:06 24 Care must be taken lest word-by-word
09:06 25 definition removed from the context of the patent would

09:06 1 lead to an overall result that departs significantly
09:06 2 from the patented invention.

09:06 3 Is that your understanding?

09:06 4 A. I would say at a high level, that's my
09:06 5 understanding.

09:06 6 Q. Okay. And that's all in Step 1?

09:06 7 A. Okay.

09:06 8 Q. Is that correct?

09:06 9 A. I think you defined the step. So the first
09:06 10 step of reviewing the patents, yes. It's part of
09:06 11 reviewing the patents.

09:06 12 MR. BURESH: Could I have the ELMO,
09:06 13 please? Thank you.

14 BY MR. BURESH:

09:07 15 Q. Do you recognize these as your slides from
09:07 16 yesterday and earlier this morning?

09:07 17 A. Yes.

09:07 18 Q. Okay. And these were the topics to be
09:07 19 addressed. I believe you said they were the steps you
09:07 20 were going to walk through in your testimony?

09:07 21 A. Correct.

09:07 22 Q. And the first step was to describe the
09:07 23 patents-in-suit?

09:07 24 A. Yes. So understand -- I think I used the word
09:07 25 "understand" the patents-in-suit.

09:07 1 Q. Okay. Understand them. Fair enough.

09:07 2 And that would correlate to the first step of
09:07 3 the infringement analysis that we've been talking
09:07 4 about?

09:07 5 A. Basically, yes.

09:07 6 Q. Okay. So as you walked through your first
09:08 7 step, the patents-in-suit, you came to this slide?

09:08 8 A. Yes. I described that slide.

09:08 9 Q. Okay. And I believe the testimony that you
09:08 10 were offering was to explain how Figure 26 from the
09:08 11 '342 patent would be an example of the claim?

09:08 12 A. Actually, what -- not quite what I was
09:08 13 intending to do.

09:08 14 Q. Okay. Do you agree that Figure 26 helped you
09:08 15 explain the claim -- Claim 1 of the '342 patent to the
09:08 16 jury?

09:08 17 A. I wasn't explaining the details of the claim
09:09 18 at this point. I was instructing the jury as what
09:09 19 components existed and identifying by color the various
09:09 20 components, parts of the claim.

09:09 21 Q. Okay. And you've in fact done that. You've
09:09 22 linked by color coding the key elements of the claim to
09:09 23 the figure?

09:09 24 A. These are the elements I thought would be
09:09 25 instructive to the jury to get them to understand this

09:09 1 optical system.

09:09 2 Q. Okay. And really I'm just asking, you were
09:09 3 trying to help the jury understand the claim language,
09:09 4 fair?

09:09 5 A. Not the entire claim language.

09:09 6 Q. But some of the key parts?

09:09 7 A. Some of the key parts of these elements.

09:09 8 Q. Okay. And you chose to use this figure for
09:09 9 that purpose?

09:09 10 A. I thought it would be useful to do that.

09:09 11 Q. And that was Slide 3.17 of your
09:10 12 demonstratives?

09:10 13 A. Yes.

09:10 14 Q. Okay. So in this phase, we're still in the
09:10 15 patents-in-suit discussion during your testimony. We
09:10 16 go next to 3.18.

09:10 17 You see that?

09:10 18 A. Yes.

09:10 19 Q. And you're talking about some patent families
09:10 20 here?

09:10 21 A. Correct.

09:10 22 Q. And then there wasn't a slide, but right after
09:10 23 this, you showed the cover page of the '089 patent.

09:10 24 Do you recall that?

09:10 25 A. Yes. I did. I do, I should say.

09:10 1 Q. And then this was the next slide that you
09:10 2 showed?

09:10 3 A. After I had given a high-level description of
09:10 4 the patents, I moved into some comments about the
09:10 5 accused monitor products.

09:10 6 Q. Okay. So you chose to show the jury in your
09:11 7 patent-in-suit discussion, where you were trying to
09:11 8 communicate an understanding of the patents, you showed
09:11 9 them one figure from one patent?

09:11 10 A. I thought I showed two, but -- for the '089.
09:11 11 I thought there was a figure.

09:11 12 Q. You did show the cover page of the '089.

09:11 13 A. Which includes a figure.

09:11 14 Q. Okay. Fair enough.

09:11 15 So you showed the cover page of one patent and
09:11 16 one figure from another patent, correct?

09:11 17 A. Yes, as I recall.

09:11 18 Q. So in the patents-in-suit, the first step of
09:11 19 the infringement analysis, there were two patents that
09:11 20 you didn't even talk about, correct?

09:11 21 A. I didn't go into the same level of detail.

09:11 22 Q. Well, I'm saying -- I'm going a step further.
09:11 23 You didn't even talk about them in terms of
09:11 24 their disclosure at all, did you?

09:11 25 A. No. That's not correct.

09:11 1 Q. Just didn't use any -- didn't use any slides?

09:11 2 A. I did not use any slides, but I talked about
09:12 3 those other patents.

09:12 4 Q. You said what family they were in?

09:12 5 A. I said what family and how they were related
09:12 6 in technology, but they would have different claims.

09:12 7 Q. Is it fair to say that if it's okay for you to
09:12 8 look at figures when you think it's helpful to explain
09:12 9 something to the jury, that it's equally okay for me
09:12 10 and my client to look at figures when we think it's
09:12 11 helpful to the jury?

09:12 12 A. I think that's fine.

09:12 13 Q. That's fair?

09:12 14 A. You can show figures.

09:12 15 Q. Okay. And you showed the jury a title page of
09:12 16 one of the patents, the '089 --

09:12 17 A. Yes.

09:12 18 Q. -- when you were on -- explaining, helping
09:12 19 them understand?

09:12 20 A. Right.

09:12 21 Q. So is it equally fair that me, Mr. Buresh, who
09:12 22 has been repeated multiple times here, and my client,
09:12 23 that when we want to look at a title page, that that's
09:12 24 equally fair?

09:12 25 A. As long as you use that title in context.

09:13 1 Q. Because context is really important, isn't it?

09:13 2 A. Sure.

09:13 3 Q. Because if we ignore the context, we could get
09:13 4 way outside the bounds of the invention, couldn't we?

09:13 5 A. The invention is in the claims.

09:13 6 Q. And if we ignore all the context in Step 1,
09:13 7 it's possible we could get way outside the bounds of
09:13 8 the invention; isn't that fair?

09:13 9 A. That may happen in rare circumstances. It did
09:13 10 not happen here.

09:13 11 Q. Now, you did also an explanation of the
09:13 12 technological value of the patents, right?

09:13 13 A. Yes. This morning I did that.

09:13 14 Q. And in fact, you showed the jury kind of how a
09:13 15 monitor works. You turned on the big blue light and
09:13 16 walked through all the layers, right?

09:13 17 A. I did that.

09:13 18 Q. Now, when you were showing how good a monitor
09:13 19 works, just so everyone is clear, you were using one of
09:14 20 ASUSTeK's monitors?

09:14 21 A. That's correct.

09:14 22 Q. Okay. You weren't actually showing any
09:14 23 prototypes of how Dr. Vasylyev and his invention
09:14 24 worked, were you?

09:14 25 A. I was indicating how his invention is

09:14 1 incorporated into that monitor as I went through my
09:14 2 description.

09:14 3 Q. And you'd agree with me that that's not a
09:14 4 conclusion that anybody's reached yet, right? The jury
09:14 5 gets to decide if the patents are being incorporated in
09:14 6 the product, not you?

09:14 7 A. That's correct.

09:14 8 Q. Okay. So you have a little assumption built
09:14 9 into your presentation that says I'm going to show how
09:14 10 good ASUS' products work, and then I'm going to say
09:14 11 that's the value of the patents.

09:14 12 There's a big assumption built in there,
09:14 13 right?

09:14 14 A. That's not how I put it.

09:14 15 Q. Okay. So you would agree with me today that
09:15 16 showing the jury how an ASUS product works does not
09:15 17 tell them the value of the patent?

09:15 18 A. They can see that the --

09:15 19 THE COURT: Doctor, you need to answer
09:15 20 his question.

09:15 21 A. Okay. Please repeat the question.

09:15 22 BY MR. BURESH:

09:15 23 Q. Showing the jury how well ASUS' products work
09:15 24 does not show them the value of the patents, does it?

09:15 25 A. Not directly.

09:15 1 Q. Okay. Debating whether I want to try this or
09:15 2 not. Okay.

09:15 3 I don't actually like touching things like
09:15 4 this. It makes me nervous.

09:15 5 A. There's a phrase, you break it, you buy it.
09:15 6 Does that apply?

09:15 7 Q. I think this one's probably already broken,
09:16 8 so...

09:16 9 Okay. This is all these sheets and the light
09:16 10 guide --

09:16 11 (Clarification by Reporter.)

09:16 12 BY MR. BURESH:

09:16 13 Q. This is called the backlight panel in an
09:16 14 LCD -- in an LCD product, correct?

09:16 15 A. Not those sheets alone. Those are part of the
09:16 16 backlight panel.

09:16 17 Q. Okay. This other part that remains attached
09:16 18 to the monitor is the LCD display?

09:16 19 A. I'm sorry. The LCD display is not there.
09:16 20 It's on the ground someplace.

09:16 21 Q. You are correct.

09:16 22 Is this the LCD display?

09:16 23 A. That is the liquid crystal display. Yes.

09:17 24 Q. Okay. With all the little millions of
09:17 25 shutters?

09:17 1 A. Correct.

09:17 2 Q. And some circuit boards?

09:17 3 A. Yes.

09:17 4 Q. That control everything?

09:17 5 A. That's where the signal comes from.

09:17 6 Q. Okay. Now, Dr. Vasylyev's -- let me ask that
09:17 7 question a different way.

09:17 8 When you did your infringement analysis, you
09:17 9 didn't point to any part of this LCD display or any of
09:17 10 the circuits that control it?

09:17 11 A. I certainly acknowledged that they're there,
09:17 12 but they weren't part of the lighting system.

09:17 13 Q. Okay. So is it fair to just set this aside?

09:17 14 A. Yeah. That's fine.

09:17 15 Q. I'm going to pull out the light guide. Okay?

09:18 16 A. That's actually not the light guide. That's
09:18 17 the optical film stack. The light guide is probably
09:18 18 still in the tray.

09:18 19 Q. All right. Fair enough. Light guide's in
09:18 20 here.

09:18 21 A. Okay.

09:18 22 Q. So set that aside. These films, were they new
09:18 23 and novel to Dr. Vasylyev?

09:18 24 A. Those kind of films are used in other
09:18 25 products.

09:18 1 Q. And had been well before 2009?

09:18 2 A. They had been used before 2009.

09:18 3 Q. Okay. So these aren't part of the invention?

09:18 4 A. Only to the extent they affect the light flow
09:18 5 from the LEDs to the screen. They're, individually,
09:18 6 just sheets.

09:18 7 Q. Okay. Now, this light guide has behind it a
09:18 8 reflector that you've talked about some?

09:18 9 A. Yes.

09:18 10 Q. The reflector that sits behind the light
09:19 11 guide, not new. People have been doing that well
09:19 12 before 2009?

09:19 13 A. Certainly they were used before 2009. Yes.

09:19 14 Q. Okay. And light guides that received LED
09:19 15 light on the edge -- what we're calling edge-lit light
09:19 16 guides -- were well known before 2009?

09:19 17 A. At least in smaller products.

09:19 18 Q. What about, you know, all the little microdots
09:19 19 you were talking about?

09:19 20 A. Deflecting elements?

09:19 21 Q. Sure. Deflecting elements.

09:19 22 I think you said there were millions of those
09:19 23 on the bottom of the light guide?

09:19 24 A. Yeah. I didn't count them, but I estimate,
09:19 25 yes, millions.

09:19 1 Q. Okay. Having millions of deflection elements,
09:19 2 the little dots, on the bottom of a light guide, not
09:19 3 new in 2009?

09:19 4 A. I wouldn't say -- I wouldn't say that. This
09:19 5 style is somewhat different, and I can't recall seeing
09:19 6 any backlight systems with these -- this density of
09:20 7 microdots of this size on other products.

09:20 8 Q. Okay. So you didn't see the exact dots, but
09:20 9 the concept of putting micro deformities on the bottom
09:20 10 of a light guide was not new?

09:20 11 A. There's many examples in the past that had
09:20 12 versions of that that didn't work the same way for
09:20 13 sure, but yes. They existed.

09:20 14 Q. While we're talking about the light guide,
09:20 15 that's the piece that when the light comes in the edge
09:20 16 I guess from the bottom up, the light moves through it
09:20 17 until it hits a deflecting element and then comes out?

09:20 18 A. It comes out either to the screen or to the
09:20 19 back reflector.

09:20 20 Q. Okay. And if it hits the reflector, then it
09:21 21 bounces back up and ultimately comes out?

09:21 22 A. It gets diffused and then comes out. Yes.

09:21 23 Q. Okay. So if we talk about the general flow of
09:21 24 light in this light guide, it's going to be coming up
09:21 25 from the bottom on the edge, right?

09:21 1 A. Correct.

09:21 2 Q. And then it'll hit deflecting elements at
09:21 3 different places and the general flow will be out
09:21 4 towards the LCD display?

09:21 5 A. It will be out towards the display, but not
09:21 6 necessarily at the right angle.

09:21 7 Q. Okay. But it'll be moving in the general
09:21 8 direction of the display?

09:21 9 A. The general direction, but again, the angles
09:21 10 are all over the map usually.

09:21 11 Q. Because the light's very scattered coming out?

09:21 12 A. The light from the back surface is scattered,
09:21 13 the light from the microdots is scattered.

09:21 14 Q. Okay. We've been talking about a light guide.
09:22 15 Is that a term that's widely used in the industry?

09:22 16 A. That's pretty common in my industry.

09:22 17 Q. Okay. So it'd be fair to say that what a
09:22 18 light guide is doing is guiding the light?

09:22 19 A. That's why it's called that.

09:22 20 Q. That's why it's called a light guide, right?

09:22 21 A. Yes. I think the patent calls it a waveguide,
09:22 22 but it's a very similar concept.

09:22 23 Q. It's still a guide?

09:22 24 A. Still a guide.

09:22 25 Q. Not a trap. It's not called a light trap, is

09:22 1 it?

09:22 2 A. The -- it's not called that, but that's what
09:22 3 happens.

09:22 4 Q. Well, just a second ago we were guiding it,
09:22 5 now we're trapping it?

09:22 6 A. Same thing when you consider TIR.

09:22 7 Q. Okay. This is your Demonstrative PDX-3.98 --

09:23 8 A. Correct.

09:23 9 Q. -- agreed?

09:23 10 And you're talking here about Claim 1 of the
09:23 11 '318 patent?

09:23 12 A. That's right.

09:23 13 Q. And this particular claim requires a
09:24 14 broad-area light input surface, correct?

09:24 15 A. Yes.

09:24 16 Q. Now, we have a edge-lit LED that you've
09:24 17 depicted?

09:24 18 A. Correct.

09:24 19 Q. And I believe during your testimony yesterday
09:24 20 you called this edge here the light input edge?

09:24 21 A. I referred to it as a light input edge. Yes.
09:24 22 It is a light input edge.

09:24 23 Q. That's what I asked. It's a light input edge,
09:24 24 yes?

09:24 25 A. You said "the"; but I said, yes, it's "a."

09:24 1 Q. Okay. And what you're depicting here is that
09:24 2 the light bounces by total internal reflection, which
09:24 3 is a big way of saying that all the light reflects?

09:24 4 A. It's -- that's the meaning, as long as the
09:24 5 indexes of refraction, as I described, are proper.

09:24 6 Q. Okay. So the light travels, is guided down
09:25 7 the light guide, until it -- some of it exits the light
09:25 8 guide. Is that what you're depicting?

09:25 9 A. Yes. There's -- these millions of
09:25 10 microstructures cause extraction, if you will, of the
09:25 11 light both towards the LCD and towards the back
09:25 12 reflector about 50/50 ratio.

09:25 13 Q. Okay. So this light is going out of the light
09:25 14 guide right here?

09:25 15 A. That's obviously one location. There's
09:25 16 thousands.

09:25 17 Q. Well, I'm just trying to understand what you
09:25 18 depicted.

09:25 19 A. Yeah. I -- that's what I've depicted.

09:25 20 Q. Okay. So we have light exiting the light
09:25 21 guide right here?

09:25 22 A. Yes.

09:25 23 Q. After being input into the light guide right
09:25 24 here?

09:25 25 A. Input, and for that angle that I show,

09:25 1 that's -- that hits that microstructure, that's what
09:25 2 happens.

09:25 3 Q. Okay. Now, in your infringement analysis, you
09:25 4 took this edge where the light is coming out and you
09:26 5 called it the input edge?

09:26 6 A. Yes. That's correct, because it is.

09:26 7 Q. So where the light goes out is where it comes
09:26 8 in?

09:26 9 A. That surface is an input surface for all the
09:26 10 reflected light.

09:26 11 Q. Okay. So when it exits, it's exiting the
09:26 12 input?

09:26 13 A. Sure.

09:26 14 Q. Okay. And just so I don't leave anything out
09:26 15 of your opinion, I suppose you're saying that because
09:26 16 it reflects off the bottom, that it's coming in here?

09:26 17 A. All the light reflecting off the bottom is
09:26 18 diffusely scattered from all the microdots, not just
09:26 19 the one, and that light -- that light flux travels to
09:26 20 that input surface that I've identified.

09:26 21 Q. The input where the light had exited?

09:26 22 A. It exits at the microdots. It comes back
09:26 23 through the planar sections around the microdots.

09:27 24 Q. Okay. I would like to look at a figure in the
09:27 25 '318 patent so we can maybe compare what you're saying

09:27 1 to the patent.

09:27 2 A. Sure.

09:27 3 Q. Do you see Figure 20 on the screen in front of
09:27 4 you?

09:27 5 A. Yes. I do.

09:27 6 Q. And this would be one of the example figures
09:27 7 from the '318 patent, correct?

09:28 8 A. Yes. That's correct.

09:28 9 Q. Now, this figure that we're seeing here, this
09:28 10 is in what I've called a light-trapping patent, right?

09:28 11 A. I believe that's what you referred to it.

09:28 12 Q. Because that's the title?

09:28 13 A. Yes. I think it is. I think that's the
09:28 14 title. I forgot.

09:28 15 Q. Light trapping in the sense that we see a
09:28 16 different kind of orientation here, right? The light's
09:28 17 not coming in the edge in this patent. The light's
09:28 18 coming down from above?

09:28 19 A. Light enters from the bottom, and then by TIR
09:28 20 is trapped in the lower structure.

09:28 21 Q. Light enters from the top, right?

09:28 22 A. From the top. Yes.

09:28 23 Q. Not the bottom?

09:28 24 A. Correct.

09:28 25 Q. Okay. So light comes down from the top, and

09:28 1 it comes in. Let's look at Ray No. 92. Okay? It
09:28 2 comes into this layer 8 right there, making layer 12
09:29 3 the light input surface?

09:29 4 A. Yes. That's correct.

09:29 5 Q. Okay. Then down here, the light exits
09:29 6 layer 8, making surface 10 the light output surface?

09:29 7 A. Yes. For this figure, that's correct.

09:29 8 Q. Now, this light ray bounces off the bottom and
09:29 9 goes back through into layer 8 again, doesn't it?

09:29 10 A. That's how it's shown.

09:29 11 Q. And surface 10 is still the output surface?

09:29 12 A. Surface 10 was the output surface as it was
09:29 13 called, I believe, in the spec.

09:29 14 Q. Okay. And that happens again with these light
09:29 15 rays, right? You have light coming down and bouncing
09:29 16 back up?

09:29 17 A. Yes. Not -- not the same quantity of light.
09:29 18 But yes. Some of the light comes back up. Some of
09:30 19 it's absorbed in that, I believe, a photoconductor
09:30 20 layer.

09:30 21 Q. And that bouncing off the bottom doesn't
09:30 22 change the understanding of what the input and output
09:30 23 layers are, surfaces are, correct?

09:30 24 A. That's correct.

09:30 25 Q. Okay. You see this little number here, 70,

09:30 1 with the dashed line?

09:30 2 A. Yes. I see it.

09:30 3 Q. It's coming down, and the arrow is kind of

09:30 4 pointing in this direction here?

09:30 5 A. Right.

09:30 6 Q. What is 70 indicating?

09:30 7 A. You know, I just don't recall.

09:30 8 Q. Okay.

09:30 9 A. It looks like a normal incident angle to that
09:30 10 lower surface is probably the way I would interpret it.

09:30 11 Q. I would represent to you that it's indicating
09:30 12 the prevailing direction of the light.

09:30 13 A. Okay.

09:30 14 Q. Would you agree or disagree with that?

09:30 15 A. In this figure, that's correct.

09:30 16 Q. Okay. And the prevailing direction of the
09:30 17 light is top to bottom?

09:30 18 A. Certainly in this figure, that's what's
09:30 19 described.

09:30 20 Q. Making the surface where the light
09:31 21 prevailingly comes in, the input, and the surface where
09:31 22 the light prevailingly goes out, the output surface?

09:31 23 A. You could say it that way.

09:31 24 Q. That's a fair understanding?

09:31 25 A. That's an interpretation that's fair.

09:31 1 Q. And if we come back to your analysis, the
09:31 2 light -- the place where the light prevailingly comes
09:31 3 in, the edge, you're not calling that the input
09:31 4 surface?

09:31 5 A. I'm calling the input surface where half the
09:31 6 light prevailingly enters the light guide structure, as
09:31 7 I've indicated.

09:31 8 Q. And this surface here, where the light
09:31 9 prevailingly goes out, you are calling the input
09:31 10 surface?

09:31 11 A. I'm calling the entire yellow outlined edge
09:32 12 the input surface, not just that one location, to be
09:32 13 clear.

09:32 14 Q. And to be clear, the place where the -- the
09:32 15 surface where the light is prevailingly going out is
09:32 16 where you're calling the input?

09:32 17 A. I'm -- that is an input surface for the light
09:32 18 coming back towards the right in this illustration.

09:32 19 Q. Now, on the screen in front of you, sir, is
09:33 20 your Demonstrative 3.92.

09:33 21 A. Yes. I see that.

09:33 22 Q. Okay. And this is for the '089 patent?

09:33 23 A. Correct.

09:33 24 Q. Now, feel free again to correct me if I'm
09:33 25 wrong. We want a clean record here.

09:33 1 But in every other patent, the surface relief
09:33 2 features that you talk about as infringing are the ones
09:33 3 on the bottom of the light guide?

09:33 4 A. I believe that's correct. Yes.

09:34 5 Q. Okay. But here, for this particular patent,
09:34 6 the surface relief features that you're pointing to are
09:34 7 not in the light guide?

09:34 8 A. I've identified other surface relief features
09:34 9 that relate to the claims of the '089. Yes.

09:34 10 Q. The surface relief features that you're
09:34 11 pointing to for this particular patent are clear up
09:34 12 here in the optical film stack?

09:34 13 A. That's correct.

09:34 14 Q. They're not part of the light guide?

09:34 15 A. That's correct.

09:34 16 Q. Okay. Now, in the '089 patent, is there an
09:34 17 example of surface relief features anywhere in that
09:34 18 patent that's placed somewhere other than the light
09:34 19 guide?

09:34 20 A. The patent describes an optical flow of light
09:34 21 and hitting -- hitting deflecting elements. It only
09:34 22 shows an example of what you might call a light guide
09:34 23 in that patent.

09:35 24 Q. Right. It shows the light guide in this
09:35 25 patent, not other layers, right?

09:35 1 A. The claims require that there be reflecting or
09:35 2 deflecting elements. I've identified those in the
09:35 3 light flow path.

09:35 4 Q. No. I agree. You've pointed to some
09:35 5 deflecting elements that are way up here. Okay? So
09:35 6 the jury can see what's happening.

09:35 7 The light guide's down here, right?

09:35 8 A. To be fair and just to make it clear to the
09:35 9 jury, this is an expanded scale. That optical film
09:35 10 stack is actually a stack, as you showed. It's very
09:35 11 close to the light guide, but it is distinct from the
09:35 12 light guide. That, I will agree.

09:35 13 Q. Okay. This is your demonstrative. Don't --
09:35 14 I'm -- you made it sound like I'm trying to mislead
09:35 15 somebody. This is your picture?

09:35 16 A. Well, you said -- you said the term "way up
09:35 17 here." I'm just telling you that it is -- the parts
09:36 18 are in this order, but when they're stacked up, they're
09:36 19 close to each other. That's all I wanted to make
09:36 20 clear.

09:36 21 Q. Okay. So let me -- with that clarification of
09:36 22 your depiction, let me ask it again.

09:36 23 The surface relief features that you're
09:36 24 pointing to in the '089 are up here?

09:36 25 A. Correct.

09:36 1 Q. Okay. They're not in the light guide anymore
09:36 2 for this patent?

09:36 3 A. For this patent, they are not.

09:36 4 Q. Okay. And my question -- going back again, I
09:36 5 don't care if you show a picture to the jury out of the
09:36 6 patents or some portion of the written description.

09:36 7 Is there any example at all in the patent
09:36 8 where the surface deflection features are not in the
09:36 9 light guide?

09:36 10 A. I believe in this -- in the figures, they
09:37 11 refer primarily to that light guide near the -- near
09:37 12 the bottom of that figure. That's what they refer to.

09:37 13 Q. Does that make the answer to my question no,
09:37 14 there's no examples?

09:37 15 A. I believe I answered that. I may be more
09:37 16 succinct. I don't recall any figures that show any
09:37 17 other deflecting elements other than in the light
09:37 18 guide.

09:37 19 Q. Okay. And again, we want to be careful not to
09:37 20 go outside the bounds of the invention, right?

09:37 21 A. We want to look at the invention and follow
09:37 22 the teachings of the light flow.

09:37 23 Q. Okay. One more question on this.

09:37 24 There's this concept of the space between the
09:37 25 optically transmissive surface and the reflective

09:37 1 surface.

09:37 2 A. Yes.

09:37 3 Q. By moving the deflection features that you're
09:38 4 looking at away from the light guide and way up here to
09:38 5 the optical stack, you've opened that space wide up,
09:38 6 right?

09:38 7 A. I've made that space about 1 millimeter longer
09:38 8 than it would have been if it was just the light guide,
09:38 9 which is 3 millimeters thick.

09:38 10 Q. Okay. But conceptually, you've moved the
09:38 11 space?

09:38 12 A. The space is defined as it's defined from the
09:38 13 reflector to the deflecting elements.

09:38 14 Q. I apologize for the slight delay. There were
09:39 15 a lot of slides.

09:39 16 Here we go.

09:39 17 Okay. Do you remember this from my opening?

09:39 18 A. Yes. I do.

09:39 19 Q. Okay. Figure 27, this is coming out of the
09:40 20 '342 patent.

09:40 21 A. Yes. I see that.

09:40 22 Q. Okay. My question for you is -- I want to
09:40 23 understand a little bit more about how the patent
09:40 24 works.

09:40 25 So you agree this is collimated light coming

09:40 1 out that I've highlighted there?

09:40 2 A. If the focal length of that lens is such that
09:40 3 the deflecting element is at the focus, then the light
09:40 4 will be collimated.

09:40 5 Q. Okay. Break that down.

09:40 6 First, does this indicate collimated light
09:40 7 coming out of the light guide through the lenses?

09:40 8 A. Yes. It's drawn that way.

09:40 9 Q. Okay. And it's collimated because it's
09:40 10 parallel?

09:40 11 A. That's the usual definition of "collimated,"
09:40 12 roughly parallel.

09:40 13 Q. And I believe you just answered my second
09:40 14 question. So let me see if I can make sure we
09:40 15 understand each other.

09:40 16 If you put this deflecting feature at the
09:41 17 focal point of this lens that it's paired with, that
09:41 18 will result in collimation?

09:41 19 A. Essentially, yes.

09:41 20 Q. Now, I'm not an optics expert at all. I do
09:41 21 know if I put my glasses on this way, I see well. And
09:41 22 if I turn them over, I can't see hardly anything.
09:41 23 Right?

09:41 24 A. Maybe in your case, yeah.

09:41 25 Q. The lenses work in one direction?

09:41 1 A. That's not true.

09:41 2 Q. Okay. But in terms of their focus, like these
09:41 3 lenses are designed to focus on my eye, right?

09:41 4 A. There's some -- some correction in your lens,
09:41 5 but a lens in general works both directions.

09:41 6 Q. Okay. When you were a kid, did you ever play
09:41 7 with a magnifying glass?

09:41 8 A. Sure.

09:41 9 Q. And I have a vivid recollection of sunlight
09:42 10 and a magnifying glass lighting some leaves on fire and
09:42 11 then getting in trouble because part of my yard burned.

09:42 12 A. You can do that with focused light.

09:42 13 Q. Okay. And that's really if the light were
09:42 14 coming down in Figure 27, that's what would be
09:42 15 happening, it being -- it would be being focused on one
09:42 16 point?

09:42 17 A. Yeah. The light would basically follow the
09:42 18 reverse path, if you will. Light would come through
09:42 19 that lens. It would hit that reflector and go back
09:42 20 towards the LED.

09:42 21 Q. Okay. Now, let me ask you this: If this
09:42 22 deflecting element that I've circled is not at the
09:42 23 focal point of this lens that it's paired with, then
09:42 24 the light won't be perfectly collimated, right?

09:42 25 A. That's correct.

09:42 1 Q. And if, for example, I took this deflecting
09:42 2 element and moved it, let's say, clear over here in
09:42 3 some random location and shot light up this way toward
09:42 4 this lens, that light coming out of that lens isn't
09:43 5 going to be collimated?

09:43 6 A. Well, depending on the details, but it will
09:43 7 be -- it could still be collimated but going in a
09:43 8 different angle, depending on the distance to the focal
09:43 9 length.

09:43 10 Q. Depending on the details?

09:43 11 A. Depending on the details.

09:43 12 Q. This is PDX-3.66 from your slides, correct?

09:43 13 A. Yes. That's correct.

09:43 14 Q. Okay. And this claim limitation, indeed, the
09:44 15 part you've highlighted, talks about a predetermined
09:44 16 alignment?

09:44 17 A. That's right.

09:44 18 Q. And that would be an alignment between the
09:44 19 deflecting element and a lens?

09:44 20 A. It would be the alignment between the array of
09:44 21 lenses and the array of microdots. Yes.

09:44 22 Q. Okay. And you've looked at my client's
09:44 23 products, the light guides?

09:44 24 A. Yes.

09:44 25 Q. Under a microscope?

09:44 1 A. Correct.

09:44 2 Q. And concluded that the little dots -- the
09:44 3 microcavities, as you call them -- are in alignment
09:44 4 with the lenses; that's your conclusion?

09:44 5 A. The microcavities, the array of microcavities,
09:44 6 all those dots, are in a predetermined alignment with
09:44 7 the lens array. Yes.

09:44 8 Q. Now, you said yesterday that all of these
09:44 9 little dots -- I'll try to highlight a couple here just
09:45 10 so the jury can see, like, what we're talking about.

09:45 11 Those are the dots we're talking about,
09:45 12 microcavities?

09:45 13 A. Yes.

09:45 14 Q. You said they were randomly placed?

09:45 15 A. Yes. They're randomly placed by design.

09:45 16 Q. In an irregular pattern?

09:45 17 A. Irregular pattern controlled by the computer
09:45 18 software that finds the locations of each dot.

09:45 19 Q. Okay. And then you come to the -- the lenses
09:45 20 that are running horizontal in this depiction, correct?

09:45 21 A. Yes.

09:45 22 Q. And those lenses, they're just, like, in a
09:45 23 sheet. They're just parallel, perfectly linear lenses?

09:45 24 A. Basically that's correct. They're a regular
09:45 25 array of lenses.

09:45 1 Q. Okay. So your testimony is that something
09:45 2 that is regular and linear is in alignment with a bunch
09:46 3 of dots that are random?

09:46 4 A. Absolutely.

09:46 5 Q. And in fact, you point out too that -- I took
09:46 6 down your testimony. You said "happen to be at the
09:46 7 center"?

09:46 8 A. That's what I said, I believe. Yes. They
09:46 9 happen to be at the center.

09:46 10 Q. Two out of millions in the light guide plate
09:46 11 that happen to be at the center?

09:46 12 A. There's certainly more than two that happen to
09:46 13 be, but the point is, as I said, the positional
09:46 14 alignment is predetermined.

09:46 15 Q. Okay. "Predetermined" means by design, right?

09:46 16 A. By design.

09:46 17 Q. So you're saying that somebody -- some optical
09:46 18 engineer somewhere in the world has, by design, chosen
09:46 19 to put two microcavities in alignment with lenses while
09:46 20 not aligning millions of other ones. That's what you
09:46 21 want this jury to understand is your opinion?

09:46 22 A. No.

09:47 23 Q. Okay. But you've pointed to two, right?

09:47 24 A. I pointed to two as examples. I could point
09:47 25 to any two. They would be in predetermined alignment.

09:47 1 Q. While most of them are not even arguably in
09:47 2 alignment. We can just see that visually, can't we?

09:47 3 A. I disagree.

09:47 4 Q. What about this one that's squarely in the --
09:47 5 in the groove of a lens?

09:47 6 A. The alignment of that dot is in a
09:47 7 predetermined alignment with the lens.

09:47 8 Q. What about this one that's in a different one?
09:47 9 Different alignment?

09:47 10 A. It's in a predetermined alignment with the
09:47 11 lens.

09:47 12 Q. And you think there's some engineer somewhere
09:47 13 in the world that has, by design, chosen to make these
09:47 14 all different?

09:47 15 A. Basically, yes. Because it's a random pattern
09:47 16 of microdots that's required for the uniformity that I
09:47 17 described.

09:47 18 Q. Yeah, it's got to be random and you have
09:47 19 something linear. Really hard to align linear with
09:47 20 random, don't you think?

09:47 21 A. They're predetermined. The alignment is
09:48 22 predetermined.

09:48 23 Q. You keep saying that, and you've said there's
09:48 24 somebody that, by design, has set this all up. You
09:48 25 haven't shown the jury any of these CAD programs you

09:48 1 were talking about yesterday, have you?

09:48 2 A. No. I have not shown the CAD program, but
09:48 3 those are -- those exist, for sure.

09:48 4 Q. Well, sure. There's programs all over the
09:48 5 place.

09:48 6 But you haven't shown the jury the one you are
09:48 7 saying is resulting in whatever alignment you're
09:48 8 pointing to?

09:48 9 A. As I -- may I answer the question with more
09:48 10 than yes or no?

09:48 11 Q. Have you showed the jury any CAD program that
09:48 12 you're relying on?

09:48 13 A. I did not show a CAD program.

09:48 14 Q. Did you find an engineer somewhere who
09:48 15 testified in a deposition that you reviewed that said,
09:48 16 I designed it this way because I want two dots to be
09:48 17 aligned while millions of other ones aren't, that's how
09:48 18 I want to do it? Did you find some testimony that said
09:48 19 that?

09:48 20 A. No. Because that's not true, what you said.

09:49 21 Q. Did you find some testimony somewhere in this
09:49 22 case that indicated a design intent, a predetermination
09:49 23 to put those two dots in an alignment with the lenses?

09:49 24 A. In my testimony, I spoke about the alignment,
09:49 25 the predetermined alignment of the array of microdots

09:49 1 with the lenses. I did not say or it isn't required
09:49 2 that they be at the center of a lens.

09:49 3 Q. Okay. My question is this -- I'm trying to
09:49 4 fully respect your testimony, but I'd like to move past
09:49 5 that and ask if you have any evidence of a design
09:49 6 intent, a predetermination, for that alignment that
09:49 7 you're showing on the screen.

09:49 8 A. I have examined these parts. I've examined
09:49 9 light guides that are from different monitors of the
09:49 10 same part number and they are the same.

09:49 11 Q. Okay. Let me ask it one more time. We'll try
09:50 12 documents. We've done depositions. We didn't see any,
09:50 13 right?

09:50 14 A. Correct.

09:50 15 Q. We didn't see any CAD program. Was there a
09:50 16 design document that you reviewed from the productions
09:50 17 that said, we're going to make two dots align?

09:50 18 A. I didn't see that because it isn't necessary.

09:50 19 Q. Okay.

09:50 20 THE COURT: Doctor, you just need to
09:50 21 answer his question.

09:50 22 THE WITNESS: Okay.

09:50 23 A. No.

09:50 24 BY MR. BURESH:

09:50 25 Q. During your testimony yesterday, and it may be

09:50 1 what you're trying to say now, you said there are tools
09:50 2 to index the microcavities with the lenses?

09:50 3 A. That is correct.

09:50 4 Q. And when did you show those tools to the jury?

09:50 5 A. I did not show those tools to the jury.

09:51 6 Q. You just said they were there?

09:51 7 A. Based on my experience and knowledge, yes.

09:51 8 Q. Okay. But you didn't show us?

09:51 9 A. I didn't have access to the -- to that data
09:51 10 from Acer -- from ASUS. Sorry.

09:51 11 Q. I'm not asking what your issues were; I'm just
09:51 12 saying you didn't show this tool for indexing to the
09:51 13 jury, did you?

09:51 14 A. I did not.

09:51 15 Q. Here, we have Claim 1 from the '562 patent on
09:52 16 your Demonstrative 3.77, correct?

09:52 17 A. Yes. That's correct.

09:52 18 Q. Okay. And this claim limitation says: The
09:52 19 surface relief features...

09:52 20 That's the microcavities, right?

09:52 21 A. Yes.

09:52 22 Q. ...formed in the second broad area surface...

09:52 23 A. Correct.

09:52 24 Q. ...according to a predetermined
09:52 25 two-dimensional pattern.

09:52 1 A. Correct.

09:52 2 Q. And your testimony yesterday was that the
09:52 3 pattern of the million dots in my client's products was
09:52 4 random?

09:52 5 A. I said it was a predetermined random pattern,
09:52 6 I think is what I said.

09:52 7 Q. A predetermined random pattern?

09:53 8 A. Yes.

09:53 9 Q. So random, in my mind, means you don't know
09:53 10 what's coming?

09:53 11 A. Maybe in your mind. Yes.

09:53 12 Q. If I go to --

09:53 13 MR. BURESH: Sorry, Judge. I'm going to
09:53 14 take us into a bad place here.

15 BY MR. BURESH:

09:53 16 Q. -- the craps table at a casino, okay, and I
09:53 17 roll the dice, it's random?

09:53 18 A. The outcome should be random.

09:53 19 Q. Meaning no one standing around the table knows
09:53 20 what it's going to be?

09:53 21 A. That's correct.

09:53 22 Q. And predetermined would mean you'd know it
09:53 23 beforehand?

09:53 24 A. That would be the implication in your casino
09:53 25 example.

09:54 1 Q. Okay. So predetermined and random seem to be
09:54 2 opposites?

09:54 3 A. Not in my mind. No.

09:54 4 Q. During your testimony yesterday, you talked
09:54 5 again about a -- some CAD program for this particular
09:54 6 patent too?

09:54 7 A. Yes. I believe I did.

09:54 8 Q. Another CAD program that no one here has seen?

09:54 9 A. I think we're talking about the same CAD
09:54 10 program for the location of the dots. Is that right?

09:54 11 Q. Sure.

09:54 12 A. Yeah. We haven't seen that program.

09:54 13 Q. You're just telling us about some CAD program?

09:54 14 A. I am.

09:54 15 MR. BURESH: Your Honor, I pass the
09:54 16 witness.

09:54 17 REDIRECT EXAMINATION

09:54 18 BY MR. REICH:

09:55 19 Q. Mr. Credelle, earlier it was pointed out that
09:55 20 you've been an expert before?

09:55 21 A. Yes.

09:55 22 Q. If you didn't believe in a position -- would
09:55 23 you join a team to help if you didn't believe in the
09:55 24 position?

09:55 25 A. I wouldn't, and that situation has arose a few

09:55 1 times.

09:55 2 Q. How strongly do you believe about the
09:55 3 inventions and the infringement in this case?

09:55 4 A. Once I understood from Mr. Katz the patents
09:55 5 and the application space, I did my homework and I felt
09:55 6 there was certainly strong merit that these patents
09:56 7 were in use in these products and I agreed to join this
09:56 8 case.

09:56 9 Q. And now that you've done the analysis,
09:56 10 completed the analysis, do you feel very strongly about
09:56 11 your opinions?

09:56 12 A. I do.

09:56 13 Q. Were you showing ASUS' monitor, when we did
09:56 14 the demonstration, to teach the jury about the patents
09:56 15 or to show how ASUS was using the patents?

09:56 16 A. It was to show how these layers go together
09:56 17 and how the light flows with the optics that are in
09:56 18 this structure.

09:56 19 Q. Now, we heard this talk about two steps and an
09:56 20 analysis for doing patent infringement.

09:56 21 Do you recall that?

09:56 22 A. Yes.

09:56 23 Q. Did you do both steps?

09:56 24 A. Yes.

09:56 25 Q. As part of Step 1, probably the most important

09:56 1 part, did you apply the Court's claim constructions?

09:56 2 A. Yes. I can't remember the -- what -- if the
09:56 3 claim construction was done when I first joined this
09:57 4 case, but I believe it was. So I always apply the
09:57 5 Court's construction however it exists.

09:57 6 Q. Is the Court's claim construction a key part
09:57 7 of Step 1?

09:57 8 A. Yes. Because the terms can be misinterpreted
09:57 9 in some cases, and that's why the Court does construe
09:57 10 certain terms, to make it clear to experts like myself
09:57 11 or any skilled artisan what it means.

09:57 12 Q. And those are examples where certain preambles
09:57 13 were not considered limiting. Those are Court claim
09:57 14 constructions in this case?

09:57 15 A. Yes. That is a Court claim construction that
09:57 16 the preambles are not limiting on the claims.

09:57 17 Q. Now, Mr. Buresh used this kind of \$2 lawyer
09:57 18 word, a written description.

09:57 19 Did you hear that?

09:57 20 A. Yes. I believe I heard him say that.

09:57 21 Q. Do you understand that if ASUS believed at all
09:57 22 that these patents were being stretched beyond their
09:57 23 disclosure, that's called a written description
09:57 24 challenge?

09:57 25 A. That is.

09:57 1 Q. Are they making a written description
09:57 2 challenge in this case?

09:58 3 A. They're not.

09:58 4 Q. So was that just a waste of everybody's time?

09:58 5 A. I would call it that.

09:58 6 Q. Now, we also heard about certain components
09:58 7 being known beforehand.

09:58 8 Do you recall that?

09:58 9 A. Yes.

09:58 10 Q. To be clear, was Dr. Vasylyev the first person
09:58 11 who came up with the actual inventions that are claimed
09:58 12 in these patents?

09:58 13 A. He is the inventor of these claims that we
09:58 14 discussed yesterday.

09:58 15 Q. And did the PTO review prior art that's listed
09:58 16 on the face of these patents?

09:58 17 A. Yes. That's the process for the Patent
09:58 18 Office.

09:58 19 Q. And did it issue these patents?

09:58 20 A. It did issue these patents. Yes.

09:58 21 Q. And I think the jury's heard about it on the
09:58 22 patent video. You -- some party could challenge the
09:58 23 invalidity if they thought something was known, but is
09:58 24 ASUS challenging invalidity in this case?

09:58 25 A. They are not.

09:58 1 Q. What is your opinion about ASUS' efforts to
09:59 2 argue noninfringement by looking at selected figures
09:59 3 rather than the language of the claims?

09:59 4 A. My opinion is that it's not appropriate.

09:59 5 Q. Why?

09:59 6 A. Because it's the claims that matter. Figures
09:59 7 and titles are informative. They're examples. But it
09:59 8 is the claims that matter.

09:59 9 Q. And do you believe that the Court's
09:59 10 instructions will say that the claims matter?

09:59 11 A. Yes. For sure.

10:00 12 MR. REICH: Mr. Diaz, could I have PTX-1,
10:00 13 the '318 patent, 7 -- Column 7, 42 through 54?

10:00 14 BY MR. REICH:

10:00 15 Q. Looking at some of this description, what --
10:00 16 and what are we seeing here in the sentence that begins
10:00 17 "For example" at Line 47?

10:00 18 A. This is referring to, I believe, Figure 1,
10:00 19 which is a description of the light guide in this
10:00 20 patent. And it says there are two surfaces, a surface
10:00 21 10 and a surface 12. Namely, you could think of it as
10:00 22 the top surface and the bottom surface.

10:00 23 And what it instructs is that the surface 10
10:00 24 is a light input surface. But however, the reverse can
10:01 25 be true and it could be an output surface. So these

10:01 1 are interchangeable. And that indicates a fundamental
10:01 2 property of optics, is that the light can go both
10:01 3 directions through an optical system. There it's kind
10:01 4 of a reversible process.

10:01 5 Q. And so the next sentence, "when surface 12 is
10:01 6 receiving light," does that make it the light receiving
10:01 7 or the light input surface?

10:01 8 A. If the surface 12 is receiving the light, it
10:01 9 makes it an input surface.

10:01 10 Q. Even though it could also be an output surface
10:01 11 if it's outputting light?

10:01 12 A. That's correct.

10:01 13 Q. And is that what we have here with the bottom
10:01 14 side of the light guide plate?

10:01 15 A. Yes. That's right.

10:01 16 Q. If the bottom side of a light guide plate
10:01 17 could not receive light, what's the point of the rear
10:01 18 reflector?

10:01 19 A. There would be no need for a rear reflector if
10:01 20 the light isn't to come back. And it is a significant
10:02 21 portion of light coming back from that surface into
10:02 22 that input. So it is clearly an input surface.

10:02 23 Q. We heard a lot about the alignment, the
10:02 24 predetermined nature of these patterns.

10:02 25 Just can you remind us again, what is a random

10:02 1 pattern in this field?

10:02 2 A. A random pattern is basically, as I said
10:02 3 yesterday, an irregular pattern. The locations are
10:02 4 designed by a computer so that there aren't hot spots
10:02 5 and cold spots from a lighting point of view across the
10:02 6 surface and that light is extracted uniformly from the
10:02 7 bottom to the top. That's an irregular pattern, and
10:02 8 that's its function.

10:02 9 Q. Are these things just made willy-nilly, every
10:02 10 single one of them different?

10:02 11 A. No. They're designed by an optical engineer
10:02 12 using a CAD program, a computer program. Testing is
10:02 13 done. And when it's deemed to be correct, that file is
10:03 14 saved in a program which instructs the laser where to
10:03 15 put the dots.

10:03 16 Q. And does that file, the CAD file, have a
10:03 17 predetermined set of pattern and alignment with lenses
10:03 18 in it?

10:03 19 A. Yes. Every file has an associated location
10:03 20 for the millions of dots. And if it's a different
10:03 21 light guide for a different product, it may have
10:03 22 different requirements. So it's a different random
10:03 23 pattern, but it's also predetermined so it can be
10:03 24 fabricated in a factory.

10:03 25 Q. Can you explain how is it -- I mean, where are

10:03 1 these -- this particular product, where is it made?

10:03 2 Where are the engineers?

10:03 3 A. This particular product was made by a company
10:03 4 called AU Optronics. Their factories are in China.
10:03 5 Some of their engineers are in Taiwan. So I'm not sure
10:03 6 who designed this, but it would be either -- engineers
10:04 7 in either one of those places.

10:04 8 Q. Now, even though you don't have the CAD file,
10:04 9 what evidence have you actually seen -- and for
10:04 10 example, we have two PG32UQ light guides here -- to
10:04 11 tell us it's made by a computer and it has a
10:04 12 predetermined pattern?

10:04 13 A. I've examined with a microscope and you can
10:04 14 see --

10:04 15 MR. BURESH: Your Honor.

10:04 16 THE COURT: Doctor, Doctor.

10:04 17 MR. BURESH: I object to -- he's doing
10:04 18 comparisons between products now that haven't been set
10:04 19 forth in his report.

10:04 20 MR. REICH: Your Honor, this is all set
10:04 21 forth in his report. He explained this in his --

10:04 22 THE COURT: Here's what I care about at
10:04 23 this point: What is -- what are you asking him that is
10:04 24 responsive to what was raised on cross?

10:04 25 MR. REICH: Evidence about predetermined

10:04 1 patterns, Your Honor.

10:04 2 THE COURT: Okay. If you'll ask the
10:04 3 questions in a context of him responding to what was
10:04 4 asked on cross, I don't care whether it's in the report
10:04 5 or not, but it's not relevant unless it is responding
10:04 6 to what was on cross.

10:05 7 BY MR. REICH:

10:05 8 Q. Mr. Credelle, what evidence do you have
10:05 9 that -- to respond to the point that you need to show a
10:05 10 predetermined pattern?

10:05 11 A. The evidence would be, I believe, it's a
10:05 12 ten-digit number that's written into the light guide
10:05 13 plate that identifies the file that determines the
10:05 14 locations of the dots.

10:05 15 Q. Can you get out a microscope and show the jury
10:05 16 that right now?

10:05 17 A. Yes. I can do that.

10:05 18 MR. REICH: May I approach with a
10:05 19 microscope?

20 THE COURT: Sure.

10:05 21 MR. REICH: May you come down and do
10:05 22 this?

10:05 23 THE WITNESS: Okay.

10:05 24 MR. BURESH: Your Honor, before he does
10:05 25 that, can we approach?

10:05 1 THE COURT: Sure.

10:05 2 (Bench conference.)

10:06 3 MR. BURESH: He is about to do an
10:06 4 infringement analysis that he has not presented in his
10:06 5 report. This comparison that they're getting ready to
10:06 6 do, nowhere disclosed.

10:06 7 THE COURT: If he answers a question --
10:06 8 if counsel frames the question that -- in a way that
10:06 9 this expert is responding to something you raised on
10:06 10 your cross, he gets to do it. That's the --

10:06 11 MR. BURESH: Your Honor, I crossed him on
10:06 12 the opinion in his report.

10:06 13 THE COURT: -- asks him a question that
10:06 14 says: You were asked about this on cross. You were
10:06 15 asked this question. You want to talk about this.

10:06 16 He now gets to explain it if you raised
10:06 17 it on cross. He gets to raise it.

10:06 18 I told every lawyer at the pretrial
10:07 19 conference if you raise something on cross, then on
10:07 20 redirect, they are not limited to what is in the
10:07 21 report. They get to explain because the jury gets to
10:07 22 hear the entire story.

10:07 23 That's -- but that's the way the question
10:07 24 needs to be framed, is you need to tether what you're
10:07 25 about to have him say something where he is -- his

10:07 1 opinion was challenged on cross for him to put this on.
10:07 2 If you can do that, he can put it in. If you can't do
10:07 3 that, he doesn't put it in because he's limited to
10:07 4 responding to what was asked on cross.

10:07 5 MR. REICH: Okay. Yes, Your Honor.

10:07 6 THE COURT: Okay. I'll listen to the
10:07 7 question, and you can object if you want, depending on
10:07 8 the way he frames it.

10:07 9 MR. BURESH: Understood. Thank you,
10:07 10 Your Honor.

10:07 11 (Bench conference concludes.)

10:07 12 BY MR. REICH:

10:08 13 Q. I'll re-ask my question real quick here.

10:08 14 Mr. Credelle, can you show the jury right now
10:08 15 a response to Mr. Buresh's point that you can't prove
10:08 16 the CAD file existed?

10:08 17 A. Yes. I believe I can show -- prove that there
10:08 18 is a file --

10:08 19 (Clarification by Reporter.)

10:08 20 A. Yes. I can show an identifying mark on the
10:08 21 light guide plate.

10:08 22 BY MR. REICH:

10:08 23 Q. All right. May I grab your tablet here?

10:08 24 A. Yes.

10:08 25 MR. REICH: May I have the ELMO,

10:08 1 Mr. Diaz?

10:08 2 BY MR. REICH:

10:08 3 Q. All right. Here's your tablet.

10:08 4 Can you show us -- tell us what you're showing
10:09 5 the jury?

10:09 6 A. I can't see what's on the screen. Oh, there
10:09 7 it is. Yeah.

10:09 8 Q. Can you center that number?

10:09 9 A. Yeah. I'll try. I apologize for the lighting
10:09 10 in this court, but you can see, I believe, that there's
10:09 11 a model number. It's a mirror image. So it's a little
10:09 12 hard to read. But that is a unique number that relates
10:09 13 to the light guide plate used in the PG32UQ that
10:09 14 basically determines where all those dots are located.

10:09 15 Q. And can you scoot it over just a little bit
10:09 16 more? So we can get that first.

10:09 17 A. Oh, the first number?

10:09 18 Q. Yeah. Is that a backwards P?

10:10 19 A. Yes. I think it's -- yeah. It's hard to
10:10 20 read, but the --

10:10 21 Q. Is it a P32 to start?

10:10 22 A. I believe that's what it is. Yes. You can
10:10 23 see it better than me.

10:10 24 Q. And can you show the same number on this light
10:10 25 guide plate to prove, to Mr. Buresh's point, that these

10:10 1 have the same number?

10:10 2 And so is that our backwards P32 that we're
10:10 3 seeing again --

10:10 4 A. Yes.

10:10 5 Q. -- in the same serial number?

10:10 6 A. Yes.

10:10 7 Q. So what does this show, to Mr. Buresh's point,
10:10 8 that he wanted evidence about a CAD file?

10:10 9 A. This is evidence to a person of skill in the
10:11 10 art, certainly to me, that there is a CAD file --
10:11 11 there's a computer file that indicates the location of
10:11 12 each and every one of those dots that I've actually
10:11 13 seen that they -- they start to line up if you put them
10:11 14 on top of each other.

10:11 15 Q. So you've also compared the dots, and they
10:11 16 line up?

10:11 17 A. I've compared the dots and I've compared the
10:11 18 lenses. They line up.

10:11 19 Q. And so in conclusion, how does this support
10:11 20 your opinion that the lenses and the pattern are
10:11 21 predetermined -- in a predetermined alignment?

10:11 22 A. They're predetermined, as I mentioned
10:11 23 yesterday, by the design of both surfaces. And the
10:11 24 alignment is also predetermined. The alignment of the
10:11 25 lenses is known. The alignment of the dots is known.

10:11 1 They're in an alignment. It doesn't say that every
10:11 2 lens is lined up with every dot. That's not what
10:11 3 the -- is -- the claim requires, but they are in an
10:11 4 alignment for sure.

10:11 5 Q. All right. You can return to your seat.

10:12 6 MR. REICH: I pass the witness,
10:12 7 Your Honor.

8 MR. BURESH: Very briefly, Your Honor.

9 THE COURT: Sure.

10:12 10 MR. BURESH: Can you give me the ELMO,
10:12 11 please?

10:12 12 Thank you.

10:12 13 RECROSS-EXAMINATION

10:12 14 BY MR. BURESH:

10:12 15 Q. So now you've shown the jury that the light
10:12 16 guide has a model number on it?

10:12 17 A. It has a part number. I'll call it a part
10:12 18 number.

10:12 19 Q. Okay. I don't see any CAD file name on here.
10:13 20 Do you?

10:13 21 A. It -- it doesn't say CAD -- it's an identifier
10:13 22 of the part number which has the associated CAD file
10:13 23 that goes with it. This is how the factory works.

10:13 24 Q. So I use a lot of Word Perfect or document
10:13 25 processing. I see a lot of file names with,

10:13 1 like, .docx on there.

10:13 2 A. Oh. Now, that would be -- that would be in
10:13 3 the spec sheet. That -- there's a -- there's a light
10:13 4 guide spec sheet from the manufacturer, a dot pattern
10:13 5 has been designed and approved. It has a part number
10:13 6 for that file. That's what's used in the factory so
10:13 7 they know what computer program to load when they're
10:13 8 making this 32-inch light guide.

10:13 9 Q. Okay. Is it -- let me ask you this: If you
10:13 10 pull the same product out of two different boxes, is it
10:13 11 real surprising to you that you're going to find the
10:14 12 same model numbers on the same product?

10:14 13 A. It's not surprising that they would be the
10:14 14 same.

10:14 15 Q. No. It's not.

10:14 16 So the CAD file that we're looking for, that
10:14 17 you now have talked about a product light guide spec
10:14 18 sheet that designates the CAD file -- so just to make
10:14 19 sure we're clear, we haven't found the CAD file, right?

10:14 20 A. Correct.

10:14 21 Q. And the spec sheet you now talked about, you
10:14 22 haven't shown the jury the spec sheet?

10:14 23 A. No.

10:14 24 Q. Okay. But you've confirmed that the model
10:14 25 numbers are the same thing -- are the same?

10:14 1 A. I confirmed that these two light guide plates
10:14 2 have the same dot pattern.

10:14 3 Q. No. You've confirmed they had the same model
10:14 4 number.

10:14 5 A. I've shown they have the same model number.
10:14 6 I've confirmed that the pattern is exactly the same.

10:14 7 Q. One is a fact, they have the same model
10:14 8 number; the other is your opinion?

10:14 9 A. It's my opinion based on measurements. Yes.
10:14 10 It's my opinion based on measurements.

10:15 11 Q. Measurements that you haven't shown the jury
10:15 12 either?

10:15 13 A. That's correct.

10:15 14 Q. Okay. Now, you looked at this paragraph
10:15 15 during your redirect?

10:15 16 A. Yes.

10:15 17 Q. And to orient the jury, this is the '318
10:15 18 patent, Column 7?

10:15 19 A. Correct.

10:15 20 Q. And I believe your counsel and you basically
10:15 21 looked at this paragraph and said the input and output
10:15 22 surface really don't matter. They can be either/or?

10:15 23 A. I believe what it says and what I summarized
10:15 24 is that either surface can be an input surface, meaning
10:15 25 the light can flow either direction.

10:15 1 Q. Okay. But here in this paragraph, when we
10:16 2 look at it, there's a concept in here that's pretty
10:16 3 important in terms of how we define those surfaces,
10:16 4 isn't there?

10:16 5 If we go up to your "for example" sentence, if
10:16 6 we have surface 10 as the light input surface, and
10:16 7 surface 12 as the light output surface, the prevailing
10:16 8 propagation direction will be from 10 to 12?

10:16 9 A. That's correct. It's normal to that -- that
10:16 10 plane.

10:16 11 Q. Okay. So if we have 10 on top, 12 on the
10:16 12 bottom, we know the prevailing direction of light?

10:16 13 A. It's from 10 to 12.

10:16 14 Q. Top to bottom?

10:16 15 A. 10 to 12. Right. That's what it says.

10:16 16 Q. Okay. Now, keep reading. Because we're not
10:16 17 just flipping the surfaces around. Something else
10:16 18 changes too. When surface 12 is receiving light and
10:16 19 surface 10 is opposing light, the prevailing direction
10:17 20 of light propagation is now in the opposite direction,
10:17 21 right?

10:17 22 A. To me that's saying it's just going from input
10:17 23 to output.

10:17 24 Q. Okay. So now we have 10 and 12, but we have
10:17 25 light going this way. So we're looking for the

10:17 1 prevailing direction?

10:17 2 A. Correct.

10:17 3 Q. Okay. So that's what we're looking for, the
10:17 4 prevailing direction of light?

10:17 5 A. That's useful information. Yeah.

10:17 6 MR. BURESH: Okay. Nothing further,
10:17 7 Your Honor.

10:17 8 MR. REICH: Nothing further from me.

10:17 9 THE COURT: You may step down.

10:17 10 THE WITNESS: Thank you.

10:17 11 THE COURT: Who's your next witness?

10:17 12 MR. REICH: Your Honor, we have
10:17 13 depositions to be read next.

14 (Clarification by Reporter.)

10:17 15 MR. REICH: Your Honor, next we have
10:17 16 depositions to be read.

10:17 17 THE COURT: How long is the first one?

10:17 18 MR. REICH: Five minutes, Your Honor.

10:18 19 THE COURT: How much is the total
10:18 20 deposition?

10:18 21 MR. REICH: Total 20 minutes.

10:18 22 THE COURT: Say again?

10:18 23 MR. REICH: 20 minutes, Your Honor.

10:18 24 THE COURT: Ladies and gentleman, would
10:18 25 you rather do 20 more minutes before we take our break,

10:18 1 or --

10:18 2 So here's what you're about to hear. In
10:18 3 lawsuits, the lawyers are able to ask the other side
10:18 4 for a deposition of certain witnesses. If the
10:18 5 plaintiff would like to know what the defendant might
10:18 6 say about a matter or vice versa, you can ask for what
10:18 7 is called a deposition.

10:18 8 What happens is the lawyers arrange for
10:18 9 the person to attend, the person is sworn in.

10:18 10 That's important. Just like you --
10:18 11 they're sworn in here in court, the person, before
10:18 12 they're deposed, is sworn in. And then the lawyers
10:18 13 have the opportunity to ask them whatever questions
10:18 14 they want to ask them and get answers.

10:18 15 Obviously, we can't bring everyone who
10:18 16 we'd like to have into court. And so a couple of
10:18 17 people are going to be presented to you by deposition.
10:19 18 The most important thing for you to remember, and I'm
10:19 19 going to give you an instruction on this at the end, is
10:19 20 the reason the seven of you are here are to be the
10:19 21 judges and assess the credibility of each witness.

10:19 22 And that's entirely and exclusively up to
10:19 23 you. The fact that a person is testifying by
10:19 24 deposition should not impact their credibility. They
10:19 25 have the equal dignity of anyone who appears in person.

10:19 1 So listen to the depositions, and then use whatever
10:19 2 tools you want -- however you evaluate whether someone
10:19 3 is telling the truth or not, you get to do that.

10:19 4 So that being said, if you all would put
10:19 5 on the depositions now. And if you would give just a
10:19 6 very brief description of who the person is that's
10:19 7 being deposed.

10:19 8 MS. HALEY: Good morning. This is Aisha
10:19 9 Haley on behalf of SVV. We will first call by
10:20 10 deposition Mr. Jaime Morquecho, who has knowledge about
10:20 11 the defendant's activities in the United States.

10:20 12 Are you ready to proceed?

13 (Deposition of Jaime Morquecho read as follows:

10:20 14 Q. Good morning, Mr. Morquecho.

10:20 15 A. Good morning.

10:20 16 Q. Your role -- well, let me back up a moment.
10:20 17 Who do you work for?

10:20 18 A. I work for ASUS Computer International.

10:20 19 Q. And can we just agree to call that ACI for
10:20 20 today?

10:20 21 A. Yes.

10:20 22 Q. Okay. What is -- what's your actual title at
10:20 23 ACI?

10:20 24 A. I'm the senior manager of service.

10:20 25 Q. And when you say "service," what kind of

10:20 1 service?

10:20 2 A. Customer service.

10:20 3 Q. Okay. How long have you worked at ACI?

10:20 4 A. About almost 15 years.

10:20 5 Q. And what ACI office do you work out of now?

10:20 6 A. I work out of the Fremont location in Fremont,
10:20 7 California.

10:20 8 Q. Were any of the accused products designed or
10:21 9 developed in California?

10:21 10 A. No.

10:21 11 Q. Was any -- let me start over.

10:21 12 Were any research and development efforts
10:21 13 relating to the products done in California?

10:21 14 A. No.

10:21 15 Q. Where does the design of the accused products
10:21 16 take place?

10:21 17 A. Overseas.

10:21 18 Q. Okay. Is that generally Taiwan?

10:21 19 A. I couldn't say for certain. It would be
10:21 20 Taiwan or China. That would be my understanding.

10:21 21 Q. And what's your understanding of where the
10:21 22 manufacture of the accused products takes place?

10:21 23 A. My understanding would be overseas as well.

24 (End of deposition.)

10:21 25 MS. HALEY: And that completes the

10:21 1 deposition of Mr. Morquecho.

10:21 2 SVV now calls Mr. Jason Wu, who is a ASUS
10:21 3 employee that was included on the notice correspondence
10:21 4 in this case.

10:21 5 (Deposition of Jason Wu read as follows:

10:21 6 Q. Mr. Wu, how long ago did you join ASUSTeK?

10:21 7 A. I joined ASUSTeK in 2021.

10:22 8 Q. And when you joined ASUSTeK, did you join the
10:22 9 legal department?

10:22 10 A. Yes.

10:22 11 Q. And you've been in charge of patent litigation
10:22 12 matters at ASUSTeK since you joined ASUSTeK; is that
10:22 13 correct?

10:22 14 A. Yes.

10:22 15 Q. Do you see Exhibit PTX-61?

10:22 16 A. I see it.

10:22 17 Q. Did you generate this report?

10:22 18 A. No.

10:22 19 Q. Who generated this report?

10:22 20 A. We have a team. They would provide or produce
10:22 21 the documents per the request by the discovery
10:22 22 requirement.

10:22 23 Q. Okay. And what's the name of the team just so
10:22 24 that we can refer to it?

10:22 25 A. Legal compliance team.

10:22 1 Q. Do the revenues represent wholesale revenues,
10:22 2 retail revenues, or a mix of both?

10:22 3 A. I do not know because it is the sales data for
10:22 4 ACI, not for ASUSTeK.

10:22 5 Q. So the sales quantity in PTX-61, for those
10:22 6 columns that say sales quantity, those are sales in the
10:23 7 United States, correct?

10:23 8 A. Correct.

10:23 9 Q. The products are manufactured by the ODMs at
10:23 10 the behest of ASUSTeK, right?

10:23 11 A. Correct.

10:23 12 Q. I'm going to refer to the column headings that
10:23 13 refer to COGS AMT.

10:23 14 MS. HALEY: Can I get the exhibit?

10:23 15 Q. That's -- and I'll just spell it out, C-O-G-S,
10:23 16 A-M-T.

10:23 17 For example, I'm looking at Column -- the
10:23 18 column header for Column G. So does this represent the
10:23 19 cost of goods sold amount?

10:23 20 A. I don't know that COGS represents cost of
10:23 21 goods.

10:23 22 Q. And when it says AMT after that, do you know
10:23 23 what the AMT represents?

10:23 24 A. I do not know.

10:23 25 Q. What types of costs are considered part of the

10:24 1 COGS?

10:24 2 A. The spreadsheet was produced by ACI. We do
10:24 3 not know what the data represents.

10:24 4 Q. So you wouldn't be able to tell me what sort
10:24 5 of costs go into these particular columns, correct?

10:24 6 A. Correct.

10:24 7 Q. With respect to the cost of goods for ASUSTeK,
10:24 8 if you wanted to find out what ASUSTeK's cost of goods
10:24 9 were, where would you go to look for that information?

10:24 10 A. I do not know.

10:24 11 Q. So ASUSTeK pays the ODMs to make the products,
10:24 12 correct?

10:24 13 A. Correct.

10:24 14 Q. So wouldn't someone at ASUSTeK have to know
10:24 15 how much the ODMs got paid for the products?

10:24 16 A. There should be someone who should have such
10:24 17 knowledge.

10:24 18 Q. And what department would that knowledge --
10:24 19 and what department would have that knowledge within
10:24 20 ASUSTeK?

10:24 21 A. I'm not sure.

10:24 22 Q. Does ASUSTeK track expenditures for product
10:25 23 development involving its monitors?

10:25 24 A. I do not know.

10:25 25 Q. Does ASUSTeK project revenues and/or profits

10:25 1 going forward?

10:25 2 A. I do not know.

10:25 3 Q. Does the letter of Exhibit PTX-16 identify a
10:25 4 number of the patents that are asserted in the current
10:25 5 litigation?

10:25 6 A. Yes.

10:25 7 Q. Okay. Fair enough.

10:25 8 Does the letter of PTX-16 ask whether ASUS was
10:25 9 willing to engage in licensing discussions with SVVTI?

10:25 10 A. Yes.

10:25 11 Q. And did ASUSTeK engage in licensing
10:25 12 discussions with SVVTI?

10:25 13 A. We provided the information of vendors and
10:25 14 recommended SVVTI to contact with the vendors.

10:25 15 Q. Okay. But that really wasn't my question. My
10:25 16 question is simple. Eight words.

10:26 17 Did ASUSTeK engage in licensing discussions
10:26 18 with SVVTI?

10:26 19 A. We did respond to Mr. Katz.

10:26 20 Q. Did ASUSTeK attempt to acquire a license from
10:26 21 SVVTI?

10:26 22 A. We did not have enough information for us to
10:26 23 assess if we should go ahead to get the license.

10:26 24 Q. Yeah. But I didn't ask why you took certain
10:26 25 actions. I'm just asking -- the question is: Did

10:26 1 ASUSTeK attempt to acquire a license from SVVTI?

10:26 2 A. SVVTI did not propose any offer before the
10:26 3 litigation.

10:26 4 Q. So you sent me an e-mail in response to the
10:26 5 letter, correct?

10:26 6 A. Yes.

10:26 7 Q. And Exhibit PX-25 reflects our December 1st,
10:26 8 2021 communication, correct?

10:26 9 A. Yes.

10:26 10 Q. Mr. Wu, this was your response, I guess after
10:26 11 my December 1st e-mail referring to Exhibit PTX-26; is
10:27 12 that correct?

10:27 13 A. Yes.

10:27 14 Q. And as part of this communication, you
10:27 15 reiterated your request for exemplary -- I'll just
10:27 16 highlight it -- exemplary claim charts; is that
10:27 17 correct?

10:27 18 A. Correct.

10:27 19 Q. Mr. Wu, do you recognize Exhibit PTX-27 being
10:27 20 my December 3rd, 2021 e-mail response back to you via
10:27 21 e-mail?

10:27 22 A. Yes.

10:27 23 Q. That's not -- yeah. That's not the question.

10:27 24 Claim charts are intended for a patent owner
10:27 25 to explain why a particular product infringes a patent,

10:27 1 correct?

10:27 2 A. Yes.

10:27 3 Q. SVVTI provided exemplary claim charts on

10:27 4 December 3rd, 2021 to ASUSTeK, correct?

10:27 5 A. Yes.

10:27 6 Q. And SVVTI provided 40 exemplary claim charts,

10:28 7 correct, at that time?

10:28 8 A. I did not count to see if there were 40 or

10:28 9 not.

10:28 10 Q. Did the e-mail say there were 40?

10:28 11 A. It was written in this way in the e-mail.

10:28 12 Q. But in response to SVVTI's notice letter, did

10:28 13 ASUSTeK change or discontinue selling any products or

10:28 14 discontinue targeting them to the U.S. market?

10:28 15 A. The orders that ASUSTeK placed are targeting

10:28 16 at its worldwide market.

10:28 17 Q. In response to SVVTI's notice letter, did

10:28 18 ASUSTeK change anything?

10:28 19 A. No.

10:28 20 Q. In response to receiving SVVTI's claim charts,

10:28 21 did ASUSTeK change anything?

10:28 22 A. No.

10:28 23 Q. Did ASUSTeK ever try to obtain a license to

10:28 24 any of the patents-in-suit?

10:28 25 A. We contacted our vendor and asked them to

10:28 1 assist us with determination of if they were using the
10:29 2 patented technologies so that we may assess if it would
10:29 3 be necessary for us to get the license.

10:29 4 Q. And did you assess that it was necessary to
10:29 5 get the license?

10:29 6 A. Because the vendor did not give us any
10:29 7 substantive response, we were not in the position to
10:29 8 conduct the assess.

10:29 9 Q. How did ASUSTeK try to obtain a license to the
10:29 10 patents-in-suit?

10:29 11 A. ASUSTeK reached out to the vendor, AUO, and
10:29 12 asked them to assist to determine if any of the
10:29 13 patented product, the technologies were used. After
10:29 14 that ASUS could be able to determine if it will be
10:29 15 necessary for them to obtain license of the patents.

10:29 16 Q. And what did ASUSTeK conclude about the
10:29 17 necessity of a license?

10:29 18 A. Because AUO did not provide any substantive
10:29 19 response, ASUSTeK -- so it was not possible for ASUSTeK
10:29 20 to conduct the assess.

10:29 21 Q. And for an inbound license, what is a typical
10:29 22 structure? Is that a lump-sum payment or a running
10:30 23 royalty?

10:30 24 A. Typically we do a lump-sum payment.

10:30 25 Q. When negotiating a new license agreement, may

10:30 1 ASUSTeK agree to a royalty that is higher or lower than
10:30 2 the amount specified in prior agreements?

10:30 3 A. The lower, the better.

10:30 4 Q. In this case, did ASUSTeK do anything to
10:30 5 mitigate potential infringement?

10:30 6 A. I would say ASUSTeK did not particularly do
10:30 7 anything with regard to this case.

10:30 8 Q. Did ASUSTeK produce any documents regarding
10:30 9 this back-and-forth communication between ASUSTeK and
10:30 10 AUO?

10:30 11 A. For before the litigation, they only provided
10:30 12 the information of a contact person whom the plaintiff
10:30 13 was able to contact with.

10:30 14 Q. How important is this case to ASUSTeK?

10:30 15 A. I do not know.

16 (End of deposition.)

10:30 17 MS. HALEY: That concludes the deposition
10:30 18 of Mr. Wu.

10:30 19 THE COURT: Ladies and gentleman of the
10:31 20 jury, we'll take our morning recess. Please remember
10:31 21 my instructions not to discuss the case amongst
10:31 22 yourselves. We'll be back in 10 or 15 minutes.

10:31 23 THE BAILIFF: All rise.

10:31 24 (Jury exited the courtroom.)

10:31 25 THE COURT: You may be seated.

10:31 1 Next witness will be your damages expert?

10:31 2 MR. CALDWELL: Yes, Your Honor.

10:31 3 THE COURT: And then you'll be done?

10:31 4 Oh, I'm sorry. You're going to call --

10:31 5 MR. CALDWELL: Yes, Your Honor.

10:31 6 THE COURT: I'm sorry. Okay. So I'm
10:31 7 ballparking. About how long do you think -- I'm not
10:31 8 holding you to it.

10:31 9 MR. PEARSON: The direct will probably be
10:31 10 an hour to hour and 15.

10:31 11 THE COURT: Let's go off the record just
10:32 12 so we can talk.

10:32 13 (Off-the-record discussion.)

10:33 14 THE COURT: We can go back on the record.

10:33 15 MR. CALDWELL: So Brad Caldwell for the
10:33 16 plaintiff.

10:33 17 Your Honor, there is something that's
10:33 18 been kind of bothering me a little bit, and I was
10:33 19 trying to put my finger on it.

10:33 20 And so in this case, when we did the jury
10:33 21 selection with Judge Manske on Thursday, we kind of had
10:33 22 the generic instructions. It wasn't really specific to
10:33 23 a lot of the details of a patent case.

10:33 24 But what's happened is we've started --
10:33 25 kind of this case has started trying a legal question

10:33 1 in front of the jury, and it just keeps getting worse
10:33 2 and worse and worse.

10:33 3 And I wanted to bring it to the Court's
10:33 4 attention because what's happened now and it's sort of
10:33 5 an implication at some point and then there are
10:34 6 actually examples where it was very explicit, the
10:34 7 defendant is literally comparing the accused products
10:34 8 to aspects of the preferred embodiment titles, figures,
10:34 9 and things like that.

10:34 10 And I have a Q&A. I can read it.
10:34 11 Although it's been pretty pervasive. And so there's a
10:34 12 lot of problems with that.

10:34 13 One, obviously it's just kind of guiding
10:34 14 the --

10:34 15 THE COURT: Why didn't you object?

10:34 16 MR. CALDWELL: Well, the problem is it's
10:34 17 actually subject to a motion in limine, and they should
10:34 18 have approached first. You're right. We could have
10:34 19 objected.

10:34 20 THE COURT: So what do you want me to do
10:34 21 now?

10:34 22 MR. CALDWELL: Well, I think the thing to
10:34 23 do now is even just a pretty noncontroversial interim
10:34 24 instruction that basically the question on infringement
10:34 25 is going to be by virtue of comparing the accused

10:34 1 products to the claims as construed by the Court, which
10:34 2 should be pretty noncontroversial.

10:34 3 At this point we can't even refer back to
10:34 4 like a preliminary instruction or something along those
10:34 5 lines that we might in some cases. I think they should
10:34 6 have approached.

10:34 7 And like I said, I could give you
10:34 8 examples where they literally say: Okay. Here's what
10:34 9 you're saying about the accused product. Now, let's
10:35 10 turn to this figure of the '318 patent and compare.
10:35 11 Like they even used that word.

10:35 12 So I had a case once where the same thing
10:35 13 sort of happened and unfortunately it happened too
10:35 14 late --

10:35 15 THE COURT: I don't know what you're
10:35 16 asking me to do.

10:35 17 MR. CALDWELL: Well, I think we want a
10:35 18 corrective instruction. A, just what I'm saying,
10:35 19 noncontroversial kind of corrective instruction that
10:35 20 infringement is analyzed by comparing the accused
10:35 21 products to the claims as construed by the Court.

10:35 22 THE COURT: And when would you like me to
10:35 23 give that?

10:35 24 MR. CALDWELL: I think when we resume
10:35 25 would be ideal. I guess my concern is I don't want to

10:35 1 wait till finals and have it be that we've argued over
10:35 2 this for the whole --

10:35 3 THE COURT: When you resume --

10:35 4 MR. CALDWELL: When we resume the trial
10:35 5 after the break.

10:35 6 THE COURT: I'm not going to do that. It
10:35 7 has no context now, and that's why I don't understand
10:35 8 why you didn't object while he was asking the
10:35 9 questions.

10:35 10 MR. CALDWELL: Yes, sir. I understand,
10:35 11 but I think some things are motions in limine for a
10:35 12 reason in the sense that it's a toothpaste-tube
10:35 13 situation.

10:35 14 THE COURT: The motion in limine means if
10:36 15 you think he's violating a motion in limine, you say,
10:36 16 Your Honor, can we approach the bench, and we take it
10:36 17 up then.

10:36 18 I can't -- I can't fix it now -- you
10:36 19 know, there -- I'm sure there are things you've said
10:36 20 that they're unhappy about that they'd like me to say,
10:36 21 you know, remember this.

10:36 22 So I will give instructions at the end of
10:36 23 the -- obviously, at the end of the trial. If you
10:36 24 all -- if anyone thinks that there needs to be
10:36 25 something added to what I ordinarily give because of

10:36 1 what's been done during trial, you can submit it. I'll
10:36 2 decide whether or not to give it. If I don't, you can
10:36 3 object that I don't.

10:36 4 But, you know, I'm -- you know, so far in
10:36 5 this case, you all have spent a lot of time worrying
10:36 6 about things -- they've spent a lot of time because
10:36 7 they have heard this whole case before.

10:36 8 So when y'all say the water's wet, they
10:36 9 jump up and say, no. We -- Judge, you've got to do
10:37 10 this prophylactically because they're going to do this.

10:37 11 And you all, having heard what they're
10:37 12 doing while they're doing it, don't object and now you
10:37 13 want me to -- I don't know what the opposite of
10:37 14 prophylactically is -- retroactively give an
10:37 15 instruction.

10:37 16 The only way this -- I can do this,
10:37 17 after -- I'm finally at the point where I can say a lot
10:37 18 of trials is, I don't know what y'all are going to ask.
10:37 19 I don't know how to fix it once it's been asked.

10:37 20 I once had -- I don't think it was this
10:37 21 case, but I don't remember -- someone after the -- we'd
10:37 22 given the charge and the jury's deliberating, saying,
10:37 23 Judge, we have a problem with something they said
10:37 24 during closing. And I'm like, okay. I can't do
10:37 25 anything about it.

10:37 1 So I've rambled a long time. I will -- I
10:37 2 understand why you're unhappy. I don't know what I
10:37 3 would have done had it been raised when counsel said
10:37 4 that. If he said that. I don't remember him saying
10:37 5 that the way you said he did.

10:37 6 But I'm just saying, from now on if you
10:37 7 have a problem, if anyone thinks the other side's
10:38 8 violating a motion in limine, object, and I will -- and
10:38 9 I'll -- if you're right, I'll deal with it then; if
10:38 10 you're not, I'll deal with it later.

10:38 11 MR. CALDWELL: Yes, sir.

10:38 12 And my apologies. I may have
10:38 13 misunderstood Your Honor's guidance yesterday about
10:38 14 making sure the parties get along, and I --

10:38 15 THE COURT: No, no, no.

10:38 16 MR. CALDWELL: -- erroneously inferred --

10:38 17 THE COURT: Let me make sure. I have no
10:38 18 problem with you objecting to anything that the other
10:38 19 side is doing at any time. What I don't care for is
10:38 20 what I consider to be relatively childish conduct
10:38 21 between the counsel, with each other, and with me in
10:38 22 response to what was going on.

10:38 23 I -- let me make clear. Let me use a
10:38 24 specific example. No judge likes objections during
10:38 25 closing arguments. That's not very deep. But if

10:38 1 someone says something like they did in the last trial
10:38 2 that needed to be objected to, you need to object and I
10:38 3 sustained it.

10:38 4 And in fact, because of what happened in
10:38 5 the last trial, which I hate, I'm now going to make you
10:38 6 exchange slides before closing arguments, which I had
10:39 7 stopped doing, because at the last trial someone put
10:39 8 something in -- in front of the jury in closing
10:39 9 argument that I had excluded. That didn't work very
10:39 10 well, and I couldn't fix it.

10:39 11 So now, though I hate doing it, I hate
10:39 12 taking the time to do it. I think closing arguments
10:39 13 are more effective. If you -- if the other side
10:39 14 doesn't know what you're going to show in your slides,
10:39 15 as long as it's within the rules, I think that's
10:39 16 better. But that's not the way we're doing it now.

10:39 17 From now on, we're going to exchange
10:39 18 closing slides. And if someone says something then,
10:39 19 object. If someone says something any time -- you have
10:39 20 to protect your client's record.

10:39 21 I'm never unhappy about you -- that's the
10:39 22 wrong way. I'm here -- I'm only here to make sure if
10:39 23 you think something's inappropriate that you raise it
10:39 24 at the time and I will rule on it. And hopefully, I'll
10:39 25 get it right.

10:39 1 But so I'm sorry if you misunderstood.
10:39 2 My concern yesterday was entirely over my perception of
10:39 3 the conduct of the lawyers. I don't think it's good in
10:40 4 front of -- it's not good in front of me. I don't
10:40 5 think it's good in front of the jurors. And so that
10:40 6 was why I said that.

10:40 7 But I am never not willing to take up any
10:40 8 objection that you all have.

10:40 9 MR. CALDWELL: Yes, sir. We'll keep an
10:40 10 eye out for it in their noninfringement expert.

10:40 11 THE COURT: Now, that being said, I
10:40 12 remember earlier we postponed an issue that you all
10:40 13 had, I think, because we thought we could do it later.
10:40 14 Is that something we should take up now?

10:40 15 MR. MCCARTY: We can take it up now, and
10:40 16 it's an objection for their technical expert who's
10:40 17 coming at the very tail end of the day. We could take
10:40 18 it up now or we could take it up -- -

10:40 19 THE COURT: Happy to do it now.

10:40 20 MR. MCCARTY: Okay. And I'll make it
10:40 21 brief, Your Honor.

10:40 22 This relates to their technical
10:40 23 noninfringement expert. His name is Dr. Goossen.
10:40 24 Specifically, Your Honor excluded this witness related
10:40 25 to his opinions for two particular terms, and it goes

10:40 1 back to this. They have a -- they had a argument at
10:40 2 claim construction on two terms.

10:40 3 And if I could have the ELMO.

10:40 4 The two terms were "light harvesting" and
10:41 5 "light converting." We heard about these two terms
10:41 6 throughout the trial. They're actually not even claim
10:41 7 terms, but they are -- they're issues that were
10:41 8 construed or subject to claim construction.

10:41 9 Your Honor found it in favor of my
10:41 10 client's position at claim construction. What happened
10:41 11 is the expert in his report sort of disobeyed
10:41 12 Your Honor's claim construction. And so Your Honor
10:41 13 struck his opinions on these two claim terms.

10:41 14 What's happened now is they're trying to
10:41 15 reintroduce -- I guess it'd be a third time -- these
10:41 16 opinions that have been subject to claim construction
10:41 17 and denied by Your Honor, excluded explicitly at the
10:41 18 pretrial conference, and are going to have this expert
10:41 19 come in and talk about opinions that were subject to
10:41 20 that claim construction and have been excluded.

10:41 21 THE COURT: Okay. I was wrong. This is
10:41 22 something dealing with their expert?

10:41 23 MR. MCCARTY: Yes.

10:41 24 THE COURT: Okay. I don't need to take
10:41 25 that up now. Let's get through -- and then.

10:42 1 MR. MCCARTY: Okay.

10:42 2 THE COURT: I thought -- for some reason
10:42 3 I thought it had to do with your damages expert --

10:42 4 MR. MCCARTY: Yeah.

10:42 5 THE COURT: -- and I had to deal with it.
10:42 6 We'll take this up before their expert, and that way
10:42 7 I'll be able to have it in better context.

10:42 8 MR. MCCARTY: I think the afternoon break
10:42 9 is probably the right time.

10:42 10 THE COURT: That's just better timing for
10:42 11 me.

10:42 12 MR. MCCARTY: All right.

10:42 13 THE COURT: Okay.

10:42 14 (Recess taken.)

10:56 15 THE BAILIFF: All rise.

10:56 16 THE COURT: Please remain standing for
10:56 17 the jury.

10:56 18 (Jury entered the courtroom.)

10:56 19 (Bench conference.)

10:56 20 THE COURT: You may be seated. Thanks.

10:56 21 MR. SIEGMUND: It's just a reminder about
10:56 22 the stipulation whenever you can.

10:56 23 THE COURT: Do you have a copy?

10:56 24 (Bench conference concludes.)

10:57 25 THE COURT: Ladies and gentleman of the

10:57 1 jury, the parties have entered into a stipulation
10:57 2 they've asked me to read to you, and when parties enter
10:57 3 into a stipulation, you are bound by it.

10:57 4 The parties agree that for the purpose of
10:57 5 asserting the issue -- assessing the issue of
10:57 6 infringement in this case, you should treat ASUSTeK
10:57 7 Computer Inc. and its wholly owned subsidiaries as one
10:57 8 actor; that is, an act of infringement by an ASUSTeK
10:57 9 wholly owned subsidiary would constitute an act of
10:57 10 infringement by defendant ASUSTeK Computer Inc. SVV
10:57 11 still has the burden to prove infringement.

10:57 12 MR. PEARSON: Daniel Pearson for SVV,
10:57 13 Your Honor. Plaintiff calls as its next witness
10:57 14 Dr. Matthew Farber.

10:58 15 (The witness was sworn.)

10:58 16 DIRECT EXAMINATION

10:58 17 BY MR. PEARSON:

10:58 18 Q. Good morning, Dr. Farber.

10:58 19 Would you please introduce yourself to the
10:58 20 jury?

10:58 21 A. Yes. My name is Matt Farber. And I live in
10:58 22 Dallas with my wife and three children.

10:58 23 Q. Are you originally from Dallas?

10:58 24 A. No. I grew up in Western New York, but my
10:58 25 wife and I have lived in Texas our entire adult lives.

10:58 1 I came down from Houston -- came down to Houston at 22,
10:58 2 met my wife the next day. And I look up now, almost
10:58 3 two decades later, and have three little kids wearing
10:59 4 Cowboy jerseys and eating brisket on Sundays.

10:59 5 Q. What do you do for a living?

10:59 6 A. I'm an economist.

10:59 7 Q. Why are you here today?

10:59 8 A. I've been asked to provide testimony regarding
10:59 9 the appropriate damages for ASUSTeK's infringement of
10:59 10 the patents-in-suit.

10:59 11 Q. Have you prepared anything to assist with your
10:59 12 testimony?

10:59 13 A. Yes. I have. I've prepared a set of
10:59 14 demonstratives.

10:59 15 Q. And are these those demonstratives?

10:59 16 A. Yes.

10:59 17 Q. Would you please describe your educational and
10:59 18 work background for the jury?

10:59 19 A. I started at the University of Richmond in
10:59 20 Virginia. While I was there, I obtained a B.S.B.A. in
10:59 21 economics and a B.A. in Spanish.

10:59 22 After that, as I said, I moved down to
10:59 23 Houston, and I taught middle and high school math for
10:59 24 four years.

10:59 25 At that point I decided to go back to school,

10:59 1 and I went to the University of Texas. While there, I
10:59 2 obtained a master's of science in economics and a Ph.D.
10:59 3 in economics.

10:59 4 Q. What have you been doing since you earned your
11:00 5 Ph.D.?

11:00 6 A. I've worked in economic consulting since then.

11:00 7 Q. What's economic consulting?

11:00 8 A. We get asked to opine on a variety of matters.
11:00 9 Since -- I've opined on numerous types of matters such
11:00 10 as breach of contract, antitrust, patent infringement.
11:00 11 I've worked on trademark infringement, copyright
11:00 12 infringement. Kind of all over the place.

11:00 13 Q. What type of companies have you had the
11:00 14 opportunity to work with?

11:00 15 A. That's one of the more fun parts of work.
11:00 16 When we get hired on a case, we get to learn all about
11:00 17 different companies and the marketplace that they work
11:00 18 on. So we just kind of get a wide range of knowledge.

11:00 19 So some examples are toy manufacturers, oil
11:00 20 pipeline companies, smartphone manufacturers,
11:00 21 restaurants. Just kind of all over the place.

11:00 22 Q. When you work as an expert in litigation, have
11:00 23 you worked on behalf of both plaintiffs and defendants?

11:00 24 A. Yes. I don't keep track. But it's probably
11:00 25 roughly half/half on both sides.

11:00 1 Q. Is your firm being compensated for your time?

11:01 2 A. They are.

11:01 3 Q. Does your compensation depend on the outcome
11:01 4 of this case?

11:01 5 A. No. It does not.

11:01 6 MR. PEARSON: Your Honor, SVV offers
11:01 7 Dr. Matthew Farber as an expert on economics and patent
11:01 8 damages.

11:01 9 MS. MARRIOTT: No objection, Your Honor.

11:01 10 THE COURT: He'll be admitted as an
11:01 11 expert.

11:01 12 BY MR. PEARSON:

11:01 13 Q. Dr. Farber, what were you asked to do in this
11:01 14 case?

11:01 15 A. I was asked to calculate damages resulting
11:01 16 from ASUSTeK's infringement of the patents-in-suit. As
11:01 17 we see, there's two patent families. And specifically
11:01 18 in this matter, I was asked to calculate a reasonable
11:01 19 royalty on their infringement of the patented
11:01 20 technology.

11:01 21 Q. Will you preview your ultimate opinion for us?

11:01 22 A. Yes. And this is a very high-level summary.
11:01 23 And we'll get into all the work. But my opinion is
11:01 24 that the royalty per unit would be \$13.96. ASUS has
11:01 25 sold approximately 4.2 million units, and so total

11:01 1 damages would be \$58,632,139.

11:02 2 Q. What sort of information did you consider in
11:02 3 forming your opinions in this case?

11:02 4 A. A variety of information. We looked at the
11:02 5 patents. We looked at legal filings, such as pleadings
11:02 6 and the complaint. We looked at company documents,
11:02 7 such as financial data and agreements.

11:02 8 We examined witness testimony in the form of
11:02 9 deposition testimony. We did our own product research.
11:02 10 We examined the academic literature. I interviewed
11:02 11 Dr. Vasylyev, and we reviewed expert reports.

11:02 12 Q. What sort of work did you do in order to come
11:02 13 to your ultimate opinion in this case?

11:02 14 A. My team and I did a lot of work here. We
11:02 15 issued a detailed report, and that report explains all
11:02 16 the reasonings for our opinion. It also includes a lot
11:02 17 of tables and charts showing the quantification of
11:02 18 damages. We produced R scripts for reading the data.
11:03 19 We produced R scripts for product feature scraping and
11:03 20 Stata code for data analysis and the regression.

11:03 21 Q. Now, before you started to determine an
11:03 22 appropriate reasonable royalty or to measure it, did
11:03 23 you have to analyze any background information?

11:03 24 A. Yes. Usually we do some background research
11:03 25 into the products at issue, the parties in the matter,

11:03 1 and the marketplaces in which those products are sold.

11:03 2 Q. Who is the plaintiff in this case?

11:03 3 A. That's SVV.

11:03 4 Q. And what is your understanding of their
11:03 5 business?

11:03 6 A. As we heard yesterday, Dr. Vasylyev founded
11:03 7 SVV in 2000, and they develop technologies relating to
11:03 8 all sorts of lighting. And they do business as Lucent
11:03 9 Optics.

11:03 10 Q. Who's the defendant in this case?

11:03 11 A. ASUS was founded in 1989. They're a Taiwanese
11:03 12 company, and they sell a variety of hardware, software,
11:03 13 and services such as the monitors at issue in this
11:03 14 matter.

11:03 15 Q. Is ASUS a large corporation?

11:03 16 A. Yes. They have thousands of employees and
11:04 17 sell products all over the world, and they have a
11:04 18 number of subsidiaries.

11:04 19 Q. And what do we see on the screen here?

11:04 20 A. This is an organizational chart from ASUS'
11:04 21 annual reports. They're publicly produced. And so at
11:04 22 the top here, we can see ASUSTeK Computer Inc., the
11:04 23 defendant in this matter. And I've highlighted the two
11:04 24 relevant subsidiaries in blue.

11:04 25 Q. Okay. Who is ASGL?

11:04 1 A. That's ASUSTeK Global Pte. Limited. That's a
11:04 2 company based in Singapore. And ASUSTeK Computer Inc.
11:04 3 owns 100 percent of that company. That's why there's
11:04 4 100 percent above the box.

11:04 5 Q. And who is ACI, the other entity you've
11:04 6 highlighted in blue?

11:04 7 A. That's ASUS Computer International, and that
11:04 8 is ASUSTeK Computer Inc.'s U.S.-based subsidiary. And
11:04 9 once again, ASUSTeK Computer Inc. owns 100 percent of
11:04 10 ACI.

11:04 11 Q. How do you learn about the relationships
11:04 12 between various of the ASUS subsidiaries?

11:04 13 A. We looked at their publicly produced financial
11:05 14 statements and their annual reports, and we examined
11:05 15 deposition testimony from ASUSTeK's representatives.

11:05 16 Q. Can you describe for the jury your
11:05 17 understanding of how ASUS' products make it to the
11:05 18 United States?

11:05 19 A. Yes. When ACI needs more monitors, it places
11:05 20 an order with ASGL and pays them for those. ASGL then
11:05 21 places an order with ASUSTeK and pays them for those.

11:05 22 ASUSTeK then orders the monitors from the ODMs
11:05 23 and directs them to ship them to ACI here in the United
11:05 24 States. And then ACI sells the monitors to consumers
11:05 25 like you and me.

11:05 1 Q. What have you learned about the infringing
11:05 2 monitors during your investigation into this case?

11:05 3 A. ASUS has sold 91 infringing models for almost
11:05 4 4.2 million infringing units, and you can see there's a
11:05 5 variety of features that go along with those models.

11:05 6 Q. How do you know that over 4 million infringing
11:06 7 monitors were sold?

11:06 8 A. ASUS produced sales data in this matter.

11:06 9 Q. If you could, please turn to Tabs 1 through 5
11:06 10 in your binder, which should be PTX-062, PTX-919,
11:06 11 PTX-920, PTX-921, and PTX-922.

11:06 12 A. Yep. I'm here.

11:06 13 Q. What are these documents?

11:06 14 A. These look like printouts of the sales data
11:06 15 ASUS produced in this matter.

11:06 16 Q. Did you rely on this information in forming
11:06 17 your opinions in this case?

11:06 18 A. I did.

11:06 19 MR. PEARSON: Your Honor, plaintiff moves
11:06 20 to admit PTX-062, PTX-919, PTX-920, PTX-921, and
11:06 21 PTX-922.

11:06 22 MS. MARRIOTT: No objection.

11:06 23 THE COURT: Admitted.

11:06 24 MR. PEARSON: Mr. Diaz, if we could
11:06 25 please see PTX-062 on the screen.

11:06 1 BY MR. PEARSON:

11:06 2 Q. What do we see on the screen here, Dr. Farber?

11:06 3 A. This is one of the files containing sales
11:06 4 data. So each row is a model, and we have a product
11:07 5 description. And then going over to the right, we have
11:07 6 the supplier, a component model number, and then sales
11:07 7 quantity, revenue, and I believe there's costs as well.
11:07 8 Though it's cut off on the screen.

11:07 9 Q. All right. If you could please turn to Tab 6
11:07 10 in your binder, which should be PTX-684.

11:07 11 A. I'm there.

11:07 12 Q. What is this document?

11:07 13 A. This is my summary of those various sales
11:07 14 data. It's just we combined the files and formatted it
11:07 15 to make it an easier read.

11:07 16 Q. And did you rely on this document you created
11:07 17 in forming your opinions in this case?

11:07 18 A. Yes. I did.

11:07 19 MR. PEARSON: Your Honor, plaintiff moves
11:07 20 to admit PTX-684.

11:07 21 MS. MARRIOTT: No objection.

11:07 22 THE COURT: Admitted.

11:07 23 MR. PEARSON: Mr. Diaz, if we could
11:07 24 please see PTX-684.

11:07 25 BY MR. PEARSON:

11:07 1 Q. What do we see on the screen here, Dr. Farber?

11:07 2 A. It looks a lot like what we just saw, but it's
11:07 3 just our formatted version. So we have each row is a
11:07 4 product. And then going to the right, we summarize
11:08 5 quantity, revenue, and cost of goods sold by year
11:08 6 from -- it would be from 2016 all the way through
11:08 7 August 2024.

11:08 8 Q. All right. If you could please turn to Tab 7
11:08 9 in your binder, which should be PTX-659.

11:08 10 A. Yes. I'm there.

11:08 11 Q. What is this document?

11:08 12 A. This is a summary of sales data for infringing
11:08 13 products only.

11:08 14 Q. Did you rely on this document in forming your
11:08 15 opinions in this case?

11:08 16 A. Yes. I did.

11:08 17 MR. PEARSON: Your Honor, plaintiff moves
11:08 18 to admit PTX-659.

11:08 19 MS. MARRIOTT: No objection.

11:08 20 THE COURT: Admitted.

11:08 21 MR. PEARSON: Mr. Diaz, could we please
11:08 22 see PTX-659?

11:08 23 BY MR. PEARSON:

11:08 24 Q. At a high level, could you please sort of
11:08 25 describe the differences in what we just saw, PTX-684,

11:08 1 and what we see now in PTX-659?

11:08 2 A. Yes. This summarizes the data and tells us a
11:08 3 little more about each product. We categorized the
11:08 4 products. We determined when damages would start for
11:09 5 each product. And then we have total unit sales, total
11:09 6 revenues, total costs of goods sold. Then we calculate
11:09 7 those on a per-unit basis as well.

11:09 8 Q. Dr. Farber, how did you make a determination
11:09 9 about which models in the far left column to include in
11:09 10 the accused product column?

11:09 11 A. I relied on Mr. Credelle for that. I also
11:09 12 relied on a stipulation agreed to between the parties.

11:09 13 Q. And what was the difference -- and what
11:09 14 difference did this stipulation, which is JTX-5, make
11:09 15 to your royalty base?

11:09 16 A. I believe it added 173,200 units to the
11:09 17 royalty base.

11:09 18 Q. And that's -- and when you relied on that
11:09 19 stipulation, that was just to conform your royalty base
11:09 20 to that required by the stipulation; is that fair?

11:09 21 A. Yes. I just wanted to, you know, be in the --
11:09 22 on the same page as the parties regarding infringement.

11:10 23 MR. PEARSON: Mr. Diaz, if I could have
11:10 24 Slide 12 in the demonstratives.

11:10 25 BY MR. PEARSON:

11:10 1 Q. What topics are you going to discuss with the
11:10 2 jury today, Dr. Farber?

11:10 3 A. I'll start by discussing the framework of my
11:10 4 analysis. I will then discuss a market approach.
11:10 5 Although I don't think it's reliable in this matter.
11:10 6 I'll cover the benefits of use as described by
11:10 7 Mr. Credelle.

11:10 8 I will then get into the income approach and
11:10 9 liability. That is the most appropriate approach in
11:10 10 this matter. I'll discuss the proper royalty
11:10 11 structure, and then I will sum all that up into my
11:10 12 opinion as to a reasonable royalty.

11:10 13 Q. Let's start with the first topic, the
11:10 14 framework. You mentioned earlier that your main task
11:10 15 is to evaluate a reasonable royalty.

11:10 16 What is a reasonable royalty?

11:10 17 A. Yeah. This is laid out by a legal statute.
11:10 18 And so it's damages adequate to compensate for the
11:11 19 infringement, but in no event less than a reasonable
11:11 20 royalty for the sale of the invention by the infringer.

11:11 21 Q. Well, how do you determine a reasonable
11:11 22 royalty in this case?

11:11 23 A. We -- the courts have laid out what's known as
11:11 24 a hypothetical negotiation analysis.

11:11 25 Q. What is a hypothetical negotiation?

11:11 1 A. We go back in time to right before the
11:11 2 parties -- or right before the infringer started
11:11 3 selling the infringing products. And we imagine that
11:11 4 the two parties sat down at a table and negotiated a
11:11 5 monetary compensation for a license to the
11:11 6 patents-in-suit.

11:11 7 They -- so I think of it as we lock them in a
11:11 8 room and they can't go out until they have a signed
11:11 9 agreement.

11:11 10 Q. Who would have participated in the
11:11 11 hypothetical negotiation in this case?

11:11 12 A. That would be SVV and ASUS.

11:11 13 Q. And when would this hypothetical negotiation
11:11 14 have happened?

11:11 15 A. January 30th, 2018.

11:11 16 Q. And how did you come to that date?

11:11 17 A. That's based on the later of the patent
11:12 18 issuance dates and the dates of first sale for each
11:12 19 infringing product.

11:12 20 Q. And then how do you know when ASUS began
11:12 21 selling infringing products?

11:12 22 A. We looked at their sales data.

11:12 23 Q. Okay. If you could, please, turn to Tab 8 in
11:12 24 your binder, which should be PTX-652.

11:12 25 A. Yes. I'm there.

11:12 1 Q. And what is this document?

11:12 2 A. This is our summary we use to determine when
11:12 3 damages would start for each product and the
11:12 4 hypothetical negotiation date.

11:12 5 Q. Did you rely on this document in forming your
11:12 6 opinions in this case?

11:12 7 A. I did.

11:12 8 MR. PEARSON: Your Honor, plaintiffs move
11:12 9 to admit PTX-652.

11:12 10 MS. MARRIOTT: No objection, Your Honor.

11:12 11 THE COURT: Admitted.

11:12 12 MR. PEARSON: Mr. Diaz, if we could
11:12 13 please see PTX-652.

11:12 14 BY MR. PEARSON:

11:12 15 Q. What do we see here on the screen, Dr. Farber?

11:12 16 A. Once again, each row is a product, and then we
11:12 17 look at the products -- or the patents each product was
11:12 18 being accused of infringing, the earliest date of
11:12 19 issuance of those patents, and the date of each sale or
11:13 20 the date of first sale for each product.

11:13 21 And then damages start on the later of those
11:13 22 two dates. So for each product, we have when damages
11:13 23 would start. And then amongst all those direct damages
11:13 24 start dates, the earliest would be the hypothetical
11:13 25 negotiation date.

11:13 1 Q. So if the jury were to decide that not all the
11:13 2 patents were infringed, would this be a good resource
11:13 3 for them to use to determine which products go with
11:13 4 which asserted patent?

11:13 5 A. Yes. It would.

11:13 6 Q. And that's seen here in Column A in PTX-652;
11:13 7 is that fair?

11:13 8 A. Yes.

11:13 9 Q. Are there any legal requirements to the
11:13 10 hypothetical negotiation?

11:13 11 MR. PEARSON: If we could go back to the
11:13 12 demonstratives, Mr. Diaz.

11:13 13 A. Yes. The parties both have to assume that the
11:13 14 patents are valid and infringed by the licensee. And
11:13 15 also importantly, the licensor, in this case SVV, has
11:14 16 to be willing to provide a license to the licensee,
11:14 17 ASUS. But ASUS also has to be willing to pay for a
11:14 18 license to the patented technology.

11:14 19 BY MR. PEARSON:

11:14 20 Q. What do the parties talk about at the
11:14 21 hypothetical negotiation?

11:14 22 A. They talk about anything relevant to that
11:14 23 negotiation I just discussed, but the courts have laid
11:14 24 out what's called -- what are called the
11:14 25 Georgia-Pacific factors. I think we heard about these

11:14 1 yesterday, but there are 15 nonexclusive factors that
11:14 2 we are asked to consider as part of our analysis.

11:14 3 Q. Did you analyze all these factors in coming to
11:14 4 your opinions in this case?

11:14 5 A. I did.

11:14 6 Q. What are the limitations on information the
11:14 7 parties can consider at the hypothetical negotiation?

11:14 8 A. They have access to all information available.
11:14 9 So normally, you think of a negotiation, you may be
11:14 10 hiding information from the other party. But in this
11:14 11 case, they get to see the other side's confidential
11:14 12 information.

11:14 13 So think of it as playing a card game with
11:14 14 your cards face up, like you do with a kid. You all
11:15 15 see all relevant information. And further, they get to
11:15 16 see up -- into the future up until the present. So
11:15 17 while it occurs in January 2018, they would know
11:15 18 information that we know today.

11:15 19 Q. So in considering these 15 factors, are there
11:15 20 any primary approaches that damages experts such as
11:15 21 yourself generally use to sort of summarize and
11:15 22 consider these factors?

11:15 23 A. Yes. There's three primary approaches. I'll
11:15 24 describe them.

11:15 25 The market approach is where we look to

11:15 1 agreements for -- that are comparable to determine what
11:15 2 the price for a license to the patent technology might
11:15 3 be.

11:15 4 In the income approach, we look at the
11:15 5 incremental profits of the infringer enabled by the use
11:15 6 of the patent technology.

11:15 7 And the cost approach, we look at how much it
11:15 8 would cost the infringer to design an alternative to
11:15 9 the patent technology that provides the same benefits.

11:15 10 Q. How do you decide among these three approaches
11:15 11 which one to use?

11:16 12 A. You look at the evidence and see where -- what
11:16 13 it supports. You know, sometimes the evidence in one
11:16 14 case pushes you toward one approach or another
11:16 15 approach.

11:16 16 Q. Did you analyze all three approaches in this
11:16 17 matter?

11:16 18 A. Yes. I did.

11:16 19 Q. Well, let's talk about them starting with the
11:16 20 market approach.

11:16 21 Did you find that the market approach was a
11:16 22 useful option in this case?

11:16 23 A. No. This is where I started my analysis, and
11:16 24 ultimately I determined that it was not a reliable
11:16 25 approach in this matter.

11:16 1 Q. What Georgia-Pacific factors are generally
11:16 2 covered by the market approach?

11:16 3 A. 1, 2, and 4.

11:16 4 Q. And what do these factors generally relate to?

11:16 5 A. They relate to licenses entered into by the
11:16 6 parties that may or may not be comparable to those --
11:16 7 to -- on an economic and technical basis.

11:16 8 Q. Did both SVV and ASUS produce patent license
11:16 9 agreements in this case?

11:16 10 A. Yes. They did.

11:16 11 Q. Did you have an opportunity to review those?

11:16 12 A. Yes.

11:16 13 Q. What did you conclude regarding the usefulness
11:17 14 of the agreements produced by SVV and ASUS in this
11:17 15 matter?

11:17 16 A. Ultimately, they're not comparable enough to
11:17 17 the agreement that would be discussed at the
11:17 18 hypothetical negotiation to use them as a basis for an
11:17 19 opinion in this matter.

11:17 20 Q. Well, how do you decide whether a patent
11:17 21 license agreement is a useful fit for use in the market
11:17 22 approach at the hypothetical negotiation?

11:17 23 A. First, the technology in those agreements
11:17 24 needs to be comparable to the technology at issue in
11:17 25 this case. I am not a technical expert. So I rely on

11:17 1 others such as Mr. Credelle for that.

11:17 2 But second, the -- those agreements need to
11:17 3 have been negotiated under circumstances similar to
11:17 4 those that would be present at the hypothetical
11:17 5 negotiation.

11:17 6 Q. And that similarity of circumstances, is that
11:17 7 what you call "economic comparability" on the screen?

11:17 8 A. Yes. Yep.

11:17 9 Q. Are both types of comparability necessary for
11:17 10 a patent license agreement to be useful for
11:18 11 consideration at the hypothetical negotiation?

11:18 12 A. Yes. If either one is not met, it's not a
11:18 13 good basis for a royalty.

11:18 14 Q. And again, what is technological
11:18 15 comparability?

11:18 16 A. It's whether the patented technology that's
11:18 17 licensed in an agreement we may have is similar to the
11:18 18 patented technology at issue in this matter.

11:18 19 So for example, you wouldn't use an agreement
11:18 20 relating to pharmaceutical drugs to determine a proper
11:18 21 royalty for a concrete patent. They're just too
11:18 22 different.

11:18 23 Q. Okay. And then what are -- could you give
11:18 24 some examples of what economic comparability might be?

11:18 25 A. Yeah. Think of all the factors that go into a

11:18 1 negotiation and the outcome of that negotiation and
11:18 2 whether those are similar to what we just discussed
11:18 3 about the hypothetical negotiation.

11:18 4 Q. Then what happens if you find that an
11:18 5 agreement is noncomparable?

11:18 6 A. Then it's not a proper basis for a reasonable
11:18 7 royalty opinion.

11:18 8 Q. Did you find SVV's and ASUS' patent license
11:18 9 agreements in this matter to be comparable or
11:19 10 noncomparable?

11:19 11 A. Ultimately, they are not comparable.

11:19 12 Q. Okay. Let's go through them. Let's start
11:19 13 with SVV's agreement with Samsung.

11:19 14 Did you have an opportunity to review this
11:19 15 license?

11:19 16 A. I did.

11:19 17 Q. When was this agreement signed?

11:19 18 A. It was signed on February 8th, 2021.

11:19 19 Q. And why is that signature date interesting in
11:19 20 this case?

11:19 21 A. Normally, the signature date and the execution
11:19 22 date are the same, but in this agreement, the execution
11:19 23 date was set to when payment was ultimately received,
11:19 24 which I think was 30 days after the signature date.

11:19 25 Q. What is your understanding of whether the

11:19 1 technology covered by the SVV-Samsung agreement is
11:19 2 technologically comparable to the agreement that would
11:19 3 result from the hypothetical negotiation?

11:19 4 A. It is technologically comparable. That
11:19 5 agreement includes a license to the patents in this
11:19 6 matter.

11:19 7 Q. Now, what about the economic circumstances?
11:20 8 Did you find that SVV-Samsung license agreement was
11:20 9 economically comparable?

11:20 10 A. No. It is not economically comparable.

11:20 11 Q. And is that what is reflected by the red Xs on
11:20 12 the screen here?

11:20 13 A. Yep. All of those rose really to economic
11:20 14 comparability.

11:20 15 Q. Okay. Well, let's start with the first one.
11:20 16 You say "not a settlement agreement." What does that
11:20 17 mean?

11:20 18 A. At the hypothetical negotiation, the two
11:20 19 parties sit down before any litigation occurs. There's
11:20 20 no threat of -- there's no ongoing litigation. So they
11:20 21 are just negotiating, you know, the value of the
11:20 22 patented technology.

11:20 23 However, the SVV-Samsung agreement, as we
11:20 24 heard yesterday, is a settlement agreement. And there
11:20 25 are differing factors that lead to results in

11:20 1 settlement agreements that don't apply to the
11:20 2 hypothetical negotiation.

11:20 3 Q. What about assumptions of validity and
11:20 4 infringement? What does that mean?

11:20 5 A. As I discussed a few minutes ago, at the
11:20 6 hypothetical negotiation, both parties have to assume
11:20 7 that the patents are valid and infringed. However, the
11:21 8 SVV-Samsung agreement does not include those
11:21 9 assumptions.

11:21 10 Q. And how does that affect the payment that was
11:21 11 made under the license?

11:21 12 A. Without those assumptions, the enforceability
11:21 13 of the patent is more in question, and all else equal,
11:21 14 that usually leads to a lower royalty payment.

11:21 15 Q. What about the next row, licensed products:
11:21 16 monitors? How does the hypothetical negotiation differ
11:21 17 from the SVV-Samsung license agreement in this regard?

11:21 18 A. At stake here, the infringing products here
11:21 19 are largely monitors. However, the Samsung, I believe
11:21 20 that there was negotiation over non-monitor products as
11:21 21 well in the SVV-Samsung agreement.

11:21 22 Q. And what about reliable sales data? What --
11:21 23 why did you find that noncomparable?

11:21 24 A. To use one of these agreements, you ultimately
11:21 25 want to figure out what they paid for use of the

11:21 1 patented technology, if you can, on a per-unit basis.
11:21 2 To do that, you need to have an idea of the number of
11:22 3 units sales they have of products that practice the
11:22 4 patented technology. I just didn't have access to
11:22 5 that.

11:22 6 Q. And then what about the final factor on here,
11:22 7 lack of nonmonetary considerations? What did you mean
11:22 8 by that?

11:22 9 A. At the hypothetical negotiation, they're
11:22 10 negotiating one thing, and that is a monetary payment.
11:22 11 However, the SVV-Samsung agreement includes a
11:22 12 standstill provision that would not be present within
11:22 13 the agreement resulting from the hypothetical
11:22 14 negotiation.

11:22 15 Q. Now, do you recall during opening, when ASUS'
11:22 16 counsel argued that because Samsung's overall sales are
11:22 17 allegedly 40 times higher than ASUS', damages in this
11:22 18 case must somehow be calculated or capped as a
11:22 19 proportion against what Samsung paid?

11:22 20 A. I do remember him talking about that.

11:22 21 Q. And what do you think about whether damages in
11:22 22 this case can be calculated as a proportion from the
11:22 23 Samsung agreement?

11:22 24 A. Ultimately, sometimes if this is the best
11:22 25 evidence we have, you can make adjustments for some of

11:23 1 these factors. However, in this case, I just -- there
11:23 2 is not reliable sales data on the products specifically
11:23 3 that use the patented technology.

11:23 4 You can't just -- they can't be -- it needs to
11:23 5 be precise, such adjustments. You can't use guesswork,
11:23 6 and I don't have that information.

11:23 7 Q. Did you review any other SVV patent license
11:23 8 agreements in your investigation in this case?

11:23 9 A. Yes. They have an agreement with MSI as well.

11:23 10 Q. Now that we sort of know how your chart on the
11:23 11 screen works, can you walk the jury through your
11:23 12 findings on the MSI agreement?

11:23 13 A. Yeah. I'll try and be a little faster this
11:23 14 time.

11:23 15 It -- similarly to the SVV-Samsung agreement,
11:23 16 it includes a license to the patents-in-suit. However,
11:23 17 many of the factors that apply to the SVV-Samsung
11:23 18 agreement also apply to the SVV-MSI agreement.

11:23 19 It is a settlement agreement unlike the
11:23 20 hypothetical negotiation.

11:23 21 The hypothetical negotiation includes
11:23 22 assumptions of validity and infringement, and the
11:23 23 SVV-MSI agreement does not.

11:23 24 The licensed products are similar, unlike the
11:24 25 SVV-Samsung agreement. However, once again, I do not

11:24 1 have reliable sales data on MSI's sales of licensed
11:24 2 products.

11:24 3

11:24 4

11:24 5

11:24 6

11:24 7

11:24 8 Q. Did you have enough information about the
11:24 9 economic circumstances in that patent assignment to
11:24 10 adjust the MSI payment to make it useful in this case?

11:24 11 A. No. I would need to convert that to a
11:24 12 monetary value, and I didn't have that information.

11:24 13 Q. What about ASUS? Did they produce any patent
11:24 14 licenses in this matter?

11:24 15 A. Yes. They have an agreement with ADT from
11:24 16 2012.

11:24 17 Q. Did you find that it was a comparable license
11:24 18 to that which would have resulted from the hypothetical
11:24 19 negotiation?

11:24 20 A. No. I did not.

11:24 21 Q. Why's that?

11:25 22 A. First, I -- I relied on Mr. Credelle, and he
11:25 23 told me that the patented technology in that agreement,
11:25 24 the licensed technology in that agreement is not
11:25 25 comparable to the patented technology that we're here

11:25 1 for today.

11:25 2 But there are also economic circumstances that
11:25 3 render it incomparable. So, for example, the
11:25 4 hypothetical negotiation does not settle litigation.
11:25 5 This agreement did -- does.

11:25 6 Similarly, as we heard with the other two, the
11:25 7 hypothetical negotiation assumes validity and
11:25 8 infringement. This agreement does not.

11:25 9 Lastly, in that agreement, it's my
11:25 10 understanding that the patents that were licensed had
11:25 11 an expiration date soon after the execution. However,
11:25 12 in this -- at the hypothetical negotiation, they'd be
11:25 13 negotiating in 2018 for a license to patents that
11:25 14 expire, I believe, between 2026 and 2030. So far off
11:25 15 in the future.

11:25 16 Q. So what is your ultimate conclusion about
11:25 17 whether the market approach is a good fit for this
11:25 18 case?

11:25 19 A. I don't think the evidence supports a reliable
11:26 20 market approach in this case.

11:26 21 Q. Okay. Let's talk about your understanding of
11:26 22 the benefits of the patented technology.

11:26 23 Which Georgia-Pacific factors relate to this?

11:26 24 A. Factors 9, 10, and 14.

11:26 25 Q. And what is your understanding of the benefits

11:26 1 of the patented technology?

11:26 2 A. I rely on Mr. Credelle for this. We heard him
11:26 3 earlier today talking about this, but it's overall
11:26 4 improved efficiency. You know, they get improved
11:26 5 brightness from the use of the patents. The monitors
11:26 6 have thinner displays, reduced power consumption,
11:26 7 improved light distribution, longer LED life, and an
11:26 8 improved color gamut.

11:26 9 Q. And is it your understanding that those
11:26 10 benefits apply to the monitor as a whole or to a
11:26 11 certain subcomponent of the monitor?

11:26 12 A. To the monitor as a whole.

11:26 13 Q. How do those benefits help ASUS' business?

11:26 14 A. Once again, this is a -- you know, a technical
11:26 15 opinion. So I rely on Mr. Credelle and Dr. Vasylyev
11:26 16 for this. But they have -- they have a lot of options.
11:27 17 So I created this figure here to try and illustrate it.

11:27 18 On the vertical axis, we have what's called
11:27 19 the "quality increase." And on the horizontal axis, we
11:27 20 have cost savings.

11:27 21 Q. So tell us about what the quality option is.

11:27 22 How would using the patented technology
11:27 23 provide a quality option to ASUS?

11:27 24 A. Because they can produce monitors more
11:27 25 efficiently, they can at the same cost have a

11:27 1 higher-quality monitor. So they could keep the cost
11:27 2 the same and increase the quality of the monitors they
11:27 3 are selling. When you increase the quality of the
11:27 4 monitors that they are selling, they can sell them for
11:27 5 more money. So that would result in higher profits.

11:27 6 Q. What about the efficiency option? What's
11:27 7 that?

11:27 8 A. This is where they can sell the same monitor
11:27 9 with the same features but at a lower cost because of
11:27 10 those cost savings. So if you sell something at the
11:27 11 same cost -- price but have lower cost, they generate
11:27 12 profits a different way.

11:27 13 Q. What are the green dots on each axis supposed
11:27 14 to represent?

11:27 15 A. Those are kind of the extreme options. It's
11:28 16 increase quality without cost savings or maximize cost
11:28 17 savings while keeping quality the same. So it's kind
11:28 18 of holding one constant and -- while moving the other
11:28 19 variable.

11:28 20 Q. Then what's represented by the blue curve?

11:28 21 A. They have a variety of options. So they can
11:28 22 mix and match quality increase, some cost savings, kind
11:28 23 of however they want in any monitor. They can -- you
11:28 24 know, to any level. So they have a variety of options
11:28 25 of how to use the patented technology.

11:28 1 Q. And then how did you determine for each
11:28 2 infringing monitor model how ASUS actually implemented
11:28 3 the patented technology on the quality versus
11:28 4 efficiency scale?

11:28 5 A. I was actually not able to look at the quality
11:28 6 increase. So I focused on the cost savings point only.
11:28 7 That green dot at the bottom.

11:28 8 Q. So you did not measure any benefits to quality
11:28 9 that ASUS may have received by using SVV's technology?

11:28 10 A. No. My analysis assumes that they kept
11:28 11 quality the same and maximized cost savings. However,
11:29 12 to the extent that they -- that they did -- that they
11:29 13 did increase quality, I do not capture those benefits
11:29 14 in my analysis.

11:29 15 Q. And so what does it mean that you don't
11:29 16 capture those benefits in your analysis?

11:29 17 A. My royalty is based on cost savings only, and
11:29 18 if there are additional benefits, I am not able to
11:29 19 consider them. They're left to ASUS.

11:29 20 Q. Turn to the next topic.

11:29 21 What is the income approach?

11:29 22 A. This relates to Georgia-Pacific Factors 8, 11,
11:29 23 12, and 13. And this is where you look at the
11:29 24 incremental profits the infringer is able to generate
11:29 25 through the use of the patented technology.

11:29 1 Q. And what Georgia-Pacific factors relate to
11:29 2 this?

11:29 3 A. 8 and 11 through 13.

11:29 4 Q. Now, did you look at cost savings when you
11:29 5 were analyzing the income approach?

11:29 6 A. Yes. I focused on cost savings, as we
11:29 7 discussed.

11:29 8 Q. And how do cost savings relate to profits?

11:29 9 A. Well, if they can produce the same monitor and
11:29 10 sell it at the same price but buy it for less money,
11:30 11 those cost savings are incremental profits. You know,
11:30 12 it's one for one. I lower my cost a dollar, I make
11:30 13 more -- a dollar more in profit.

11:30 14 Q. And how do you measure those cost savings that
11:30 15 are enabled by ASUS' use of the patented technology?

11:30 16 A. I use a regression. And as you can see here,
11:30 17 a regression is a highly studied topic in economics and
11:30 18 other fields, you know, textbooks, economic articles,
11:30 19 journals and all over.

11:30 20 Q. Is a regression something that's only
11:30 21 associated with the political polling context?

11:30 22 A. No. You can use it in a number of contexts.
11:30 23 It's a valuable mathematical tool that a lot of people
11:30 24 apply in various industries.

11:30 25 Q. What type of awards have been won for work on

11:30 1 developing regression equations?

11:30 2 A. You know, Bates Clark medals, which are
11:30 3 awarded to economists under the age of 40. As you've
11:30 4 heard of, MacArthur genius grants, they've got
11:31 5 economists that base their work in regression. And,
11:31 6 you know, Nobel Prizes have gone to economists for
11:31 7 their work with regressions as well.

11:31 8 Q. Why is a regression applicable in this case?

11:31 9 A. Regression is a widely used tool to try to
11:31 10 mathematically quantify a relationship between two
11:31 11 variables. That's what I'm trying to do here, is
11:31 12 mathematically quantify the relationship between the
11:31 13 use of the patented technology and ASUSTeK's costs.

11:31 14 Oftentimes in a matter like this, we don't get
11:31 15 data that allows us to be this precise. In this
11:31 16 instance, we have -- we have purchase data and sales
11:31 17 data that includes purchases of over 9 million
11:31 18 monitors. And so I have a lot of data, and I can use a
11:31 19 regression here.

11:31 20 Q. Now, why did you examine ASUS' costs through a
11:31 21 regression rather than ASUS' revenue?

11:31 22 A. I mean, as we heard earlier, you know, through
11:31 23 the deposition, we just -- we don't actually know
11:31 24 what -- ASUS was unable to tell us what the revenue
11:31 25 means from that data.

11:32 1 Further, Mr. Credelle pointed me to the cost
11:32 2 savings as the -- you know, the primary benefit of the
11:32 3 patented technology. So I focused there. There are
11:32 4 costs, and that data's a lot cleaner than their
11:32 5 price -- pricing.

11:32 6 Q. What do you assume in the course of doing a
11:32 7 regression analysis?

11:32 8 A. We start with the baseline assumption that the
11:32 9 two variables are not related. So in this instance,
11:32 10 that these patented technology would not have any cost
11:32 11 savings. That is our baseline assumption. It's called
11:32 12 the "null hypothesis."

11:32 13 However, if we -- only with enough statistical
11:32 14 evidence can we reject the hypothesis and accept an
11:32 15 alternative hypothesis that there are cost savings or
11:32 16 that there is a cost difference. We will see if it's
11:32 17 cost savings, I suppose.

11:32 18 Q. And then how did you measure the relationship
11:32 19 between the use of the patented technology and costs?

11:32 20 A. We collected data on a lot of different
11:33 21 features in the monitors, which you can see here. And
11:33 22 the idea is to isolate the relationship between the
11:33 23 various features of the monitors and costs one by one.

11:33 24 And so we're focusing on the use of the
11:33 25 patented technology, but a regression is meant to

11:33 1 isolate the impact of that on cost from the impact of
11:33 2 these other variables you see here.

11:33 3 Q. How did you construct the dataset that you
11:33 4 used to run your regression analysis?

11:33 5 A. We started with ASUSTeK's purchase data we saw
11:33 6 earlier, and it has, you know, purchase data on
11:33 7 millions of monitors that are purchased and has the
11:33 8 prices they actually paid.

11:33 9 And then we combined that with our own product
11:33 10 data, whether it uses the patented technology according
11:33 11 to Mr. Credelle. And we looked at other features and
11:33 12 other factors.

11:33 13 So we scraped websites to determine the
11:33 14 features of all these monitors and the dataset. And we
11:33 15 then created our own dataset there and merged it with
11:34 16 ASUSTeK's purchase data to create a dataset that would
11:34 17 allow for a regression such as the one we've described.

11:34 18 Q. Now, did you produce the R code that you used
11:34 19 to construct this dataset?

11:34 20 A. Yes.

11:34 21 Q. If you could, please, turn to Tab 9 in your
11:34 22 binder, which should be PTX-683.

11:34 23 A. Yes. I'm here.

11:34 24 Q. And what is this document?

11:34 25 A. This is the R script used to combine the data

11:34 1 and scrape other websites for features and then combine
11:34 2 the purchase data and the scraped data into the
11:34 3 regression dataset.

11:34 4 MR. PEARSON: Your Honor, plaintiff moves
11:34 5 to admit PTX-683.

11:34 6 MS. MARRIOTT: No objection.

11:34 7 THE COURT: Admitted.

11:34 8 MR. PEARSON: Mr. Diaz, if we could
11:34 9 please see PTX-683.

11:34 10 BY MR. PEARSON:

11:34 11 Q. What do we see here, Dr. Farber?

11:34 12 A. This is the script that I would probably --
11:34 13 we'd all probably prefer I don't get into the details.
11:34 14 So this is the R script we just described.

11:34 15 MR. PEARSON: All right. Mr. Diaz, if we
11:34 16 could go back to the demonstratives.

11:35 17 BY MR. PEARSON:

11:35 18 Q. Dr. Farber, once you have the dataset ready,
11:35 19 what's the next step in your analysis?

11:35 20 A. We specify a regression equation.

11:35 21 Q. What is a regression equation?

11:35 22 A. So regression is a tool, and it's a, you know,
11:35 23 widely used tool. But you want to make it specific to
11:35 24 what you're trying to measure. So we specify all the
11:35 25 variables in the -- in the model that we're running.

11:35 1 So here we have the cost for each variable.
11:35 2 On the left, that's called the dependent variable. And
11:35 3 all the variables to the right are called the
11:35 4 independent variables.

11:35 5 Think of each row in the dataset as one
11:35 6 monitor purchase and each column as one of the features
11:35 7 that we're measuring.

11:35 8 Q. So the variables are to the right of the equal
11:35 9 sign; is that right?

11:35 10 A. Yeah. That's all the -- that's all the
11:35 11 features in the -- in the variables for which we're
11:35 12 trying to measure the impact on cost.

11:35 13 Q. And could you explain just for one, just for
11:35 14 the infringing variable, what the Greek letters and
11:36 15 subscripts mean?

11:36 16 A. Yes. It's not as scary as it looks. The X
11:36 17 for infringing is a 1 or a 0. It's 1 if it infringes,
11:36 18 and it's 0 if it does not.

11:36 19 And that letter left of the beta tells us what
11:36 20 the impact on cost is from the use of the patented
11:36 21 technology. That is the coefficient of interest in
11:36 22 this matter, in this model.

11:36 23 Q. Well, how do you do the actual calculations?

11:36 24 A. We use what's called -- we use a program
11:36 25 called "Stata" that is, you know, highly used for

11:36 1 statistical analyses and regression such as this.

11:36 2 Q. And what sort of information did the results
11:36 3 contain?

11:36 4 A. You can see it on the right here, but for each
11:36 5 variable in the model, it shows the coefficient. And
11:36 6 it shows measures of statistical significance of that
11:36 7 coefficient. It also shows measures of statistical
11:36 8 significance to the model as a whole and the number of
11:36 9 observations in the model.

11:36 10 Q. Well, and how do you interpret the
11:36 11 coefficients of your regression model?

11:36 12 A. We are quantifying those between these
11:37 13 variables in costs. So here's a couple of examples
11:37 14 here. But if a -- if one of the monitors in the
11:37 15 dataset has a camera on it, it costs ASUS on average
11:37 16 \$35.30 more to purchase, holding all other factors in
11:37 17 regression constant. As -- you know, kind of what we
11:37 18 may expect there.

11:37 19 Similarly, that's -- that other variable there
11:37 20 is size and inches. And that means that holding all
11:37 21 the other variables constant, in a monitor that is
11:37 22 1 inch larger than another monitor, on average will
11:37 23 cost ASUS \$16.45 more to purchase.

11:37 24 Q. And what did you find was the cost savings
11:37 25 associated with infringement?

11:37 1 A. Here, we see a negative. And what a negative
11:37 2 means is that it actually -- the cost decreases. So
11:37 3 this means that an infringing monitor on average,
11:37 4 holding all else constant, costs ASUS \$21.85 less than
11:37 5 a noninfringing monitor.

11:37 6 Q. And who receives these cost savings?

11:38 7 A. ASUS.

11:38 8 Q. Did you produce this data code you used to run
11:38 9 your regression and its output?

11:38 10 A. I did.

11:38 11 Q. If you could please turn to Tabs 10 and 11 in
11:38 12 your binder, which should be PTX-686 and 687.

11:38 13 A. Yes. I'm there.

11:38 14 Q. And what are these documents?

11:38 15 A. One of these is the code itself, and one is
11:38 16 the log file showing the results of the code.

11:38 17 Q. And did you rely on these documents in forming
11:38 18 your opinions in this case?

11:38 19 A. I did.

11:38 20 MR. PEARSON: Your Honor, plaintiff moves
11:38 21 to admit PTX-686 and 687.

11:38 22 MS. MARRIOTT: No objection.

11:38 23 THE COURT: Admitted.

11:38 24 MR. PEARSON: Mr. Diaz, if we could
11:38 25 please see those plaintiff's exhibits.

11:38 1 BY MR. PEARSON:

11:38 2 Q. What do we see on the screen here, Dr. Farber?

11:38 3 A. This is the log file of the one we ran the
11:38 4 regression code. So it contains all the code and all
11:38 5 the output of the code.

11:38 6 MR. PEARSON: All right. If we could go
11:38 7 back to the demonstratives, Mr. Diaz.

11:38 8 BY MR. PEARSON:

11:38 9 Q. What sort of tests did you run on your
11:38 10 regression analysis to make sure that your cost savings
11:38 11 were not the result of random chance or error?

11:39 12 A. First, we ran a t-test of coefficients of
11:39 13 significance on that cost savings due to patent
11:39 14 technology. And you see the value there, and that is
11:39 15 0.016. That's called a p-value.

11:39 16 And that tells us the probability that we
11:39 17 would end up with a coefficient this large if cost
11:39 18 savings were truly zero in the population. So this
11:39 19 gives me confidence that the -- the cost savings we're
11:39 20 seeing are present, that they're not actually zero and
11:39 21 just, you know, a spurious correlation.

11:39 22 Q. What's the F-test?

11:39 23 A. That tests the significance of the model as a
11:39 24 whole. And the p-value there is 0.000, and that tells
11:39 25 me that the model is pretty well specified.

11:39 1 Q. What is the R-squared test?

11:39 2 A. That tells us the percentage of variation in
11:39 3 the dependent variable, cost, that can be explained by
11:39 4 the variation in our independent variables in our
11:39 5 model. And that shows that 74 percent of the variation
11:39 6 in costs is explained by our -- by all the features we
11:40 7 have in the -- to the right of that equal sign.

11:40 8 Q. Did you perform any sensitivity analyses on
11:40 9 your regression?

11:40 10 A. Yes. We typically tweak the model a little
11:40 11 bit and try and see if our coefficient changes. It
11:40 12 doesn't. And as you can see, it doesn't change a lot
11:40 13 here for several tweaks. So that gives me confidence
11:40 14 in our model as well.

11:40 15 Q. Is this the first regression you ran in this
11:40 16 case?

11:40 17 A. No. It is not.

11:40 18 Q. Why did you run multiple regressions?

11:40 19 A. I started my initial report, I ran a
11:40 20 regression focusing on the products I believe that the
11:40 21 parties would have focused on at the hypothetical
11:40 22 negotiation. However, Mr. Ferioli, ASUS' damages
11:40 23 expert, decided that in his opinion, it seemed that he
11:40 24 thought they would have focused on a larger set of
11:40 25 infringing products.

11:40 1 So, you know, I wanted to try and align with
11:40 2 him where I could, and I looked at those larger set of
11:41 3 infringing products and ended up with this regression.

11:41 4 Q. I don't think he was introduced during opening
11:41 5 statements, but could you please identify for the jury
11:41 6 Mr. Ferioli?

11:41 7 A. Yes. I met him yesterday. He's back there in
11:41 8 the purple shirt.

11:41 9 Thank you, Mr. Ferioli.

11:41 10 Q. And you understand that he will have the
11:41 11 opportunity to come and testify if he has any
11:41 12 complaints about your regression?

11:41 13 A. I believe that to be the case.

11:41 14 Q. Did Mr. Ferioli dictate the terms of your
11:41 15 amended regression?

11:41 16 A. No. We -- we kind of -- you know, it can be a
11:41 17 point of disagreement if they look at a smaller set or
11:41 18 a larger set of products. And, you know, that's
11:41 19 reasonable.

11:41 20 So we looked at the largest set of products if
11:41 21 that's what he felt they would have done at the
11:41 22 hypothetical negotiation, but we rejected some other
11:41 23 changes he suggested.

11:41 24 Q. How did the results of your original
11:41 25 regression and your updated regression differ?

11:41 1 A. The original regression showed cost savings of
11:41 2 \$20.37 per unit, and this regression shows cost savings
11:41 3 of \$21.85 per unit. So generally, they're pretty
11:41 4 close.

11:41 5 Q. And which regression did you present to the
11:41 6 jury?

11:41 7 A. The second one.

11:42 8 Q. Did you just present the amended regression to
11:42 9 the jury because it resulted in a higher amount of cost
11:42 10 savings?

11:42 11 A. No. I did not. I -- just like at the
11:42 12 hypothetical negotiation, the parties have to agree. I
11:42 13 just -- it seems like Mr. Ferioli believes they'd use
11:42 14 the wider set of products. And so I wanted to reduce
11:42 15 dispute between the parties here.

11:42 16 Q. How do these incremental cost savings of
11:42 17 \$21.85 per infringing unit benefit ASUS?

11:42 18 A. If they can sell a product with the same
11:42 19 features, they will sell it for the same price. But if
11:42 20 they can buy it at a lower cost, those cost savings
11:42 21 represent additional profits for ASUS.

11:42 22 Q. Now, are all the accused infringing products
11:42 23 in this case normal, nonportable desktop monitors like
11:42 24 we see around the courtroom?

11:42 25 A. No. There are two other types of accused

11:42 1 products in this case. The first, which you see here,
11:42 2 are portable monitors.

11:42 3 Q. And how did you calculate the cost savings for
11:43 4 the portable monitors?

11:43 5 A. Well, I figured at the hypothetical
11:43 6 negotiation they would focus on the standard monitors,
11:43 7 as those make up the vast majority of the accused
8 products.

11:43 9 So you see the cost savings in green. And on
11:43 10 the left there in the proportion, the denominator is
11:43 11 the average cost for the accused products.

11:43 12 So using a proportion, I looked -- I saw the
11:43 13 portable monitors cost less. So I scaled those cost
11:43 14 savings down to represent the lower cost for portable
11:43 15 monitors. So scaling those down, it looks like
11:43 16 portable monitors, the cost savings would be \$17.80 per
11:43 17 unit.

11:43 18 Q. And did you follow the same process for the
11:43 19 other infringing category of products, Chromebooks?

11:43 20 A. Yes. With one additional step. A Chromebook
11:43 21 is kind of like a small laptop. And as you imagine,
11:43 22 there's a keyboard and such. So I focused on the cost
11:43 23 for the display part of the Chromebook, and then I
11:43 24 scaled down using a proportion like we see here.

11:43 25 Q. So what did you do next after doing these

11:43 1 scalings?

11:43 2 A. I concluded a weighted average cost savings
11:43 3 across the three types of products. And so as you can
11:44 4 see, most of the accused units in this matter are
11:44 5 nonportable monitors. So that's going to be weighted
11:44 6 the most heavily. So the weighted average cost savings
11:44 7 across all products is \$21.37 per unit.

11:44 8 Q. What did you look at next in your reasonable
11:44 9 royalty analysis?

11:44 10 A. I looked at the royalty structure the parties
11:44 11 would have agreed to. And this is Georgia-Pacific
11:44 12 Factors 3, 6, and 7.

11:44 13 Q. What are the two basic options of royalty
11:44 14 structures for patent license agreement?

11:44 15 A. There's a lump-sum royalty structure and a
11:44 16 running royalty payment structure. In a lump sum,
11:44 17 there is one dollar amount to be agreed to, and the
11:44 18 infringer, ASUSTeK in this matter, would receive a
11:44 19 paid-up license through the expiration of the
11:44 20 patent-in-suit, but they pay one time at the beginning.

11:44 21 Q. And what is a running royalty?

11:44 22 A. In a running royalty, the parties agree to a
11:44 23 per-unit rate or a per-dollar rate. So it could be a
11:44 24 number of -- a number of dollars per unit or a
11:44 25 percentage of revenues, and they pay up over time, kind

11:45 1 of quarterly or annually based on how much of the
11:45 2 products have been sold.

11:45 3 Q. Now, in your opinion, which structure would
11:45 4 the parties have agreed to in this case?

11:45 5 A. They would have agreed to a running royalty.
11:45 6 There's two main reasons here. And the first is that
11:45 7 generally in the technology industry, running royalties
11:45 8 are more common.

11:45 9 But second, it allows the parties to align
11:45 10 their incentive. So if ASUS makes more use of the
11:45 11 invention, SVV would earn more money along with ASUS.

11:45 12 It's pretty hard to predict, you know, at the
11:45 13 hypothetical negotiation how many units they would sell
11:45 14 through the separation of the patents-in-suit,
11:45 15 particularly when they're 12 years out.

11:45 16 And so it's -- it would be easier for them to
11:45 17 agree on a per-unit royalty and then have a running
11:45 18 royalty going forward.

11:45 19 Q. And then how did you calculate damages using a
11:45 20 running royalty in this matter?

11:45 21 A. I determined a royalty per unit, as I just
11:45 22 talked about in the running royalty. And then to get
11:45 23 total reasonable royalty, multiply that by the number
11:46 24 of sold units.

11:46 25 Q. What's the final topic that you have to

11:46 1 discuss with the jury?

11:46 2 A. My ultimate opinion as to a reasonable
11:46 3 royalty.

11:46 4 Q. And what Georgia-Pacific factors relate to
11:46 5 your ultimate opinion?

11:46 6 A. 5, 8, and 15.

11:46 7 Q. Now, before you told the jury that you
11:46 8 calculated ASUS' cost savings as \$21.37 per unit as a
11:46 9 weighted average.

11:46 10 Do you remember that?

11:46 11 A. I do.

11:46 12 Q. Is it your opinion that the royalty -- the
11:46 13 reasonable royalty to SVV should be that entire \$21.37?

11:46 14 A. No. The parties will want to share in those
11:46 15 cost savings together. They would both want a piece of
11:46 16 those.

11:46 17 Q. Well, how would the parties figure out how to
11:46 18 split the \$21.37?

11:46 19 A. They would look at their relative
11:46 20 contributions toward the generation of those
11:46 21 incremental profits of \$21.37.

11:46 22 Q. And what would SVV's and ASUS' respective
11:47 23 contributions to the \$21.37 in cost savings be?

11:47 24 A. SV -- or ASUS would offer their
11:47 25 commercialization activity, such as selling activities

11:47 1 and general administrative activities, and SVV would
11:47 2 offer the research and development toward that patent
11:47 3 technology.

11:47 4 Q. And how is the research and development a good
11:47 5 corollary for receiving technology through a patent
11:47 6 license agreement?

11:47 7 A. Research and development is there for new
11:47 8 ideas, and this is a new idea that ASUS would be using.

11:47 9 Q. And then how did you quantify these
11:47 10 contributions?

11:47 11 A. I looked to ASUSTeK's annual reports in the --
11:47 12 their publicly available financial statements as part
11:47 13 of their annual reports to look at how they maximize
11:47 14 profits through these activities.

11:47 15 Q. All right. If you could, please, turn to
11:47 16 Tab 12 in your binder, which should be PTX-678.

11:47 17 A. I'm there.

11:48 18 Q. What is this document?

11:48 19 A. This is our summary of ASUSTeK's operating
11:48 20 expenses over time from 2018 through 2023.

11:48 21 MR. PEARSON: Your Honor, plaintiffs move
11:48 22 to admit PTX-678.

11:48 23 MS. MARRIOTT: No objection.

11:48 24 THE COURT: Admitted.

11:48 25 MR. PEARSON: Mr. Diaz, if we could

11:48 1 please see PTX-678 on the screen.

11:48 2 BY MR. PEARSON:

11:48 3 Q. What do we see here, Dr. Farber?

11:48 4 A. This shows ASUSTeK's investments in selling
11:48 5 expenses, general administrative activities, and
11:48 6 research and development activities each year from 2018
11:48 7 through 2023 and then in total. And at the bottom, it
11:48 8 shows R&D's share of those expenses each year and in
11:48 9 total.

11:48 10 Q. And it looks like, based on the title of this
11:48 11 exhibit, you relied on ASUS' nonconsolidated statements
11:48 12 of operating expenses; is that correct?

11:48 13 A. Yes. It is.

11:48 14 MR. PEARSON: Mr. Diaz, if we could go
11:48 15 back to the demonstratives.

11:48 16 BY MR. PEARSON:

11:48 17 Q. What are the two types of financial statements
11:49 18 that you looked at from ASUS in forming your opinions
11:49 19 in this case?

11:49 20 A. ASUSTeK Computer produces nonconsolidated
11:49 21 financial statements, which is just for that entity,
11:49 22 and consolidated financial statements, which it
11:49 23 consolidates the numbers for all of their subsidiaries
11:49 24 and ASUSTeK Computer together.

11:49 25 Q. So consolidated is the financial statements

11:49 1 for every entity that you're showing on the screen
11:49 2 here?

11:49 3 A. Yes. They'd all be included as part of the
11:49 4 financial -- the consolidated financial statements.

11:49 5 Q. And in your opinion, which set of financial
11:49 6 statements is more relevant in this case?

11:49 7 A. I'm trying to focus on the defendant in this
11:49 8 matter, ASUSTeK Computer Inc., and so I focused on the
11:49 9 nonconsolidated, which just looks at their finances,
11:49 10 not the finances of all the companies on the screen
11:49 11 here.

11:49 12 Q. How did you use these nonconsolidated
11:49 13 financial reports that we just saw summarized at
11:50 14 PTX-678?

11:50 15 A. I calculated ASUSTeK's share operating
11:50 16 expenses that go toward R&D activities, and that's
11:50 17 65.3 percent.

11:50 18 Q. So after finding the relative percentage spent
11:50 19 on R&D as a proportion of its operational expenses, how
11:50 20 did you implement your -- this relative contribution
11:50 21 apportionment and your opinion?

11:50 22 A. I applied the 65.3 percent and 100 minus that,
11:50 23 34.7 percent, to the cost savings to split the -- to
11:50 24 split it between the parties according to their
11:50 25 contributions toward the -- those cost savings.

11:50 1 Q. Is this a fair way to split the benefit of the
11:50 2 \$21.37 that ASUS receives for infringing SVV's
11:50 3 technology?

11:50 4 A. Yes. Generally, ASUS spends 65.3 percent of
11:50 5 its operating expenses on R&D, and they would not have
11:50 6 to do that to generate these cost savings. So that
11:50 7 would be how it would be discussed at the hypothetical
11:51 8 negotiation.

11:51 9 Q. So then how do you use this contribution
11:51 10 apportionment in your royalty opinion?

11:51 11 A. To split the 21.37 amongst the parties. So of
11:51 12 the \$21.37, SVV would receive \$13.96, and ASUSTeK would
11:51 13 receive \$7.41.

11:51 14 Q. So what's your ultimate opinion on an
11:51 15 appropriate reasonable royalty per unit that the jury
11:51 16 should award for each infringing product in this case?

11:51 17 A. The parties would agree that ASUSTeK would pay
11:51 18 SVV \$13.96 for each infringing unit sold.

11:51 19 Q. Okay. And then how did you get from your
11:51 20 reasonable royalty per unit to your royalty opinion in
11:51 21 this matter?

11:51 22 A. I multiplied the per-unit royalty by the
11:51 23 number of units sold and got to my reasonable royalty.
11:51 24 So each unit would be \$13.96 paid to SVV.

11:51 25 ASUSTeK has sold 4,199,168 units through

11:51 1 trial. When you multiply those, you -- that results in
11:52 2 a reasonable royalty of \$58,632,139. And there's some
11:52 3 rounding in there that's not in my, you know, math, but
11:52 4 if you multiply, it won't be perfectly exact. It's
11:52 5 just rounding.

11:52 6 Q. So whenever you did the calculations, you used
11:52 7 more precise numbers than what are seen on the screen?

11:52 8 A. Yes.

11:52 9 Q. Now, the number of sold units, that came from
11:52 10 the data that we discussed what seems like a long time
11:52 11 ago now; is that right?

11:52 12 A. Yes. That data went through August 2024. So
11:52 13 I projected from September 1st through yesterday.

11:52 14 Q. And how did you do that?

11:52 15 A. I looked at their units sold in 2024. I
11:52 16 calculated a number of units sold per day and
11:52 17 multiplied it by the number of days between the 1st and
11:52 18 the 23rd of September.

11:52 19 Q. Why do you believe the royalties you
11:52 20 calculated are reasonable in this matter and the
11:52 21 parties would have agreed to them at the hypothetical
11:52 22 negotiation?

11:52 23 A. Well, first, they reflect the actual benefits
11:53 24 to ASUS. I measured the benefit to ASUS, not to anyone
11:53 25 else. I used ASUS' data.

11:53 1 Second, they're apportioning the incremental
11:53 2 value of the economic contributions of the patented
11:53 3 technology. I'm not capturing benefits outside of the
11:53 4 patented technology.

11:53 5 Third, I'm accounting for ASUS' contributions,
11:53 6 as we just discussed in -- on the contribution
11:53 7 apportionment.

11:53 8 Fourth, ASUS has not identified any acceptable
11:53 9 noninfringing alternatives that would allow them to
11:53 10 access the benefits of the patented technology.

11:53 11 And fifth, this is consistent with the
11:53 12 Georgia-Pacific factors we talked about earlier.

11:53 13 Q. Now, SVV has also set forth a theory regarding
11:53 14 indirect infringement.

11:53 15 Have you calculated alternative damages under
11:53 16 that scenario?

11:53 17 A. I have.

11:53 18 Q. And what's the difference between the two?

11:53 19 A. I understand that indirect infringement
11:53 20 requires notice, and so damages would start when they
11:53 21 received the letter that we saw yesterday on
11:53 22 February 25th, 2021.

11:53 23 So the per-unit royalty is the same, but
11:54 24 damages start -- they start later, so there are fewer
11:54 25 infringing units. So I multiply the 13.96 by a lower

11:54 1 number, as we see here, a little under 3 million units,
11:54 2 and it results in an indirect infringement royalty
11:54 3 figure of approximately \$41.5 million.

11:54 4 Q. Is it your opinion that direct infringement
11:54 5 damages and indirect infringement are -- damages are
11:54 6 additive, that the jury should award both the 58 and
11:54 7 the 41?

11:54 8 A. No. That should not happen. I understand
11:54 9 that if both are found, the direct infringement number
11:54 10 applies. Indirect infringement is an alternative only
11:54 11 if direct infringement is not found.

11:54 12 Q. All right, Dr. Farber. For one last time,
11:54 13 will you please summarize your opinion on damages in
11:54 14 this matter?

11:54 15 A. Yes. I measured the benefits to ASUS to the
11:54 16 patent technology. And I split that between the
11:54 17 parties resulting in a reasonable royalty of \$13.96 per
11:54 18 infringing unit sold. I multiply it by the number of
11:54 19 infringing units through trial, resulting in a
11:55 20 reasonable royalty of \$58,632,139.

11:55 21 MR. PEARSON: Dr. Farber, thank you for
11:55 22 your time.

11:55 23 Your Honor, I pass the witness.

11:55 24 THE COURT: Ladies and gentleman, we'll
11:55 25 take our lunch recess. If you all would be back by

11:55 1 1:30, we'll get started then.

11:55 2 As I said yesterday, we have a food court
11:55 3 right next door. Y'all eat wherever you want, but I'm
11:55 4 saying for convenience purposes, there's a food court
11:55 5 right next door.

11:55 6 THE BAILIFF: All rise.

11:55 7 (Jury exited the courtroom.)

11:55 8 THE COURT: Is there anything we need to
11:55 9 take up?

11:55 10 MR. CALDWELL: Not by the plaintiffs.

11:55 11 THE COURT: I'll see you at 1:30.

11:56 12 (Recess taken.)

01:34 13 THE BAILIFF: All rise.

01:34 14 THE COURT: Please remain standing for
01:34 15 the jury.

01:34 16 (Jury entered the courtroom.)

01:34 17 THE COURT: Thank you. You may be
18 seated.

01:34 19 Counsel?

01:34 20 MS. MARRIOTT: Thank you.

01:34 21 CROSS-EXAMINATION

01:34 22 BY MS. MARRIOTT:

01:35 23 Q. Good afternoon, Dr. Farber.

01:35 24 A. Good afternoon.

01:35 25 Q. My name is Michelle Marriott. I'm one of the

01:35 1 attorneys representing ASUS in this litigation. It's a
01:35 2 pleasure to meet you.

01:35 3 A. Nice to meet you too.

01:35 4 Q. Now, I have some questions for you about your
01:35 5 testimony that you gave prior to lunch. At the very
01:35 6 beginning of the testimony that you gave you stated, I
01:35 7 think, that you were assuming that the patents were
01:35 8 infringed; is that correct?

01:35 9 A. Yes.

01:35 10 Q. Okay.

01:35 11 MS. MARRIOTT: And if we could pull up
01:35 12 PTX-659, please. And zoom in on that top -- yeah,
01:35 13 there we go.

01:35 14 BY MS. MARRIOTT:

01:35 15 Q. And this is one of the documents that you
01:35 16 showed to the jury; is that correct?

01:35 17 A. Yes.

01:35 18 Q. Okay. Now, I just want to be really clear.
01:35 19 This is not an ASUSTeK document, correct?

01:35 20 A. No. This is a summary of various -- source of
01:36 21 information and my attachments.

01:36 22 Q. Right. This is a document you made?

01:36 23 A. Yes.

01:36 24 Q. Okay. So these are your words on the
01:36 25 categories at the top?

01:36 1 A. Yes.

01:36 2 Q. Okay. And so here, if -- the highlighted
01:36 3 category E, Column E, that we're seeing, do you see
01:36 4 that?

01:36 5 A. Yes.

01:36 6 Q. Where it says: Infringing unit sales.
01:36 7 Do you see that?

01:36 8 A. Yes. I do.

01:36 9 Q. Okay. You don't have an opinion that those
01:36 10 are infringing; isn't that correct?

01:36 11 A. No.

01:36 12 Q. You don't have any opinion whatsoever on
01:36 13 infringement in this case; isn't that true?

01:36 14 A. That's true.

01:36 15 Q. Okay. And when you created this document,
01:36 16 that's just the title that you put on this column. Is
01:36 17 that a fair characterization?

01:36 18 A. Yes.

01:36 19 Q. And you're relying on Dr. Credelle for that,
01:36 20 right?

01:36 21 A. Yes.

01:36 22 Q. Okay. Because that's SVV's opinion, right?

01:36 23 A. Yes.

01:36 24 Q. It's not a fact?

01:36 25 A. No. I believe that's to be tried this week.

01:37 1 Q. And certainly ASUS does not agree that any of
01:37 2 its monitors are infringing unit sales, correct?

01:37 3 A. I would guess not.

01:37 4 Q. And maybe I missed it in your testimony that
01:37 5 you provided to the jury this morning, but if in fact
01:37 6 the jury finds the patents are not infringed, you would
01:37 7 agree with me that the damages are zero?

01:37 8 A. Yes. I would.

01:37 9 Q. Okay. Now, sir, in this hypothetical
01:37 10 negotiation that you were describing for the jury,
01:37 11 that's a pretend negotiation, right?

01:37 12 A. Yes.

01:37 13 Q. Never actually happened?

01:37 14 A. Correct.

01:37 15 Q. So we're kind of imagining what might have
01:37 16 happened in the real world had they actually sat down
01:37 17 at the table?

18 A. Yes.

01:37 19 Q. Okay. And it would be SVV on one side, right?

01:37 20 A. Yes.

01:37 21 Q. Okay. And ASUS on the other?

01:37 22 A. Yes.

01:37 23 Q. And I believe your testimony was they have to
01:38 24 reach an agreement, right?

01:38 25 A. Yes.

01:38 1 Q. Okay. And typically, almost always, maybe
01:38 2 always, for parties to reach an agreement, both sides
01:38 3 have to be reasonable. You would agree with me?

01:38 4 A. Yes.

01:38 5 Q. Because if you're not reasonable and you're
01:38 6 sitting across from someone negotiating, the other
01:38 7 side's going to walk away; isn't that true?

01:38 8 A. Most likely.

01:38 9 Q. Okay. And we can't have that in our
01:38 10 hypothetical pretend negotiation. We can't walk away,
01:38 11 right?

01:38 12 A. Correct.

01:38 13 Q. Okay. So we have to assume reasonableness?

01:38 14 A. Yes.

01:38 15 Q. Okay. Now, I believe that you testified, and
01:38 16 there's a slide to this effect, that there were two
01:38 17 settlement agreements that SVV has entered into.

01:38 18 Do you recall that testimony?

01:38 19 A. I do.

01:38 20 Q. Okay. And both of those settlement
01:38 21 agreements, those both relate, at least in part, to the
01:38 22 four patents that we're talking about here in this
01:38 23 trial, correct?

01:38 24 A. Yes. I think we talked about that.

01:38 25 Q. Okay. One's with Samsung?

01:39 1 A. Yes.

01:39 2 Q. The other's with MSI?

01:39 3 A. Yes.

01:39 4 Q. And for both of those, SVV is the one granting
01:39 5 the license, correct?

01:39 6 A. Correct.

01:39 7 Q. Okay. Now, these two agreements did happen in
01:39 8 real life, right?

01:39 9 A. Yes.

01:39 10 Q. They're not pretend?

01:39 11 A. They are not pretend.

01:39 12 Q. And we're not having to imagine them?

01:39 13 A. No.

01:39 14 Q. Okay. And those two companies, Samsung and
01:39 15 MSI, are the only two companies ever that have ever
01:39 16 taken a license to any of SVV's patents; isn't that
01:39 17 correct?

01:39 18 A. I can't speak to other patents necessarily.
01:39 19 For these patents, I believe that to be true.

01:39 20 Q. Sure. That's fair.

01:39 21 For these four patents that we're talking
01:39 22 about, it's only Samsung and it's only MSI, correct?

01:39 23 A. Correct.

01:39 24 Q. Okay. And neither of those companies did so
01:39 25 voluntarily, did they?

01:39 1 A. They settled litigation, if that's what you're
01:39 2 asking.

01:39 3 Q. Yeah. They didn't come to SVV and say, I want
01:40 4 to use your technology. Can we do a license, right?

01:40 5 A. Correct.

01:40 6 Q. They got sued?

01:40 7 A. They were sued before the license agreements
01:40 8 were executed, yes.

01:40 9 Q. Okay. And then they settled the litigation?

01:40 10 A. Yes.

01:40 11 Q. And when they settled that lawsuit, they got a
01:40 12 license to the patents, right?

01:40 13 A. They did.

01:40 14 Q. Okay. And they got a forever license to the
01:40 15 patents; isn't that true?

01:40 16 A. Yes. I believe that's true.

01:40 17 Q. Yeah. They are covered all the way through
01:40 18 the expiration of the patents. For as long as the
01:40 19 patents are alive, they're covered, right?

01:40 20 A. Yes.

01:40 21 Q. Okay. And that was for just one lump sum;
01:40 22 isn't that true?

01:40 23 A. There was additional compensation as part of
01:40 24 them, but I guess monetary value --

01:40 25 Q. Yeah.

1 A. -- alone.

01:40 2 Q. That's a good clarification. Monetary value.
01:40 3 One lump sum?

01:40 4 A. Yep, monetary compensation was structured as a
01:40 5 lump-sum payment.

01:40 6 Q. Okay. So they're not continuing to pay SVV so
01:40 7 much a unit like you just testified to the jury ASUS
01:41 8 would have done?

01:41 9 A. Correct.

01:41 10 Q. Okay. Now, Samsung and MSI, when they settled
01:41 11 those lawsuits, companies do that all the time, right?

01:41 12 A. Yes.

01:41 13 Q. Okay. And they do that because there's a high
01:41 14 cost to defending litigation, right?

01:41 15 A. Yes.

01:41 16 Q. And there's nothing wrong with defending
01:41 17 yourself. Would you agree with that?

01:41 18 A. No, nothing wrong at all.

01:41 19 Q. Okay. Just like ASUS is doing in this case?

01:41 20 A. Correct.

01:41 21 Q. And certainly you wouldn't say that ASUS
01:41 22 should be punished for doing that, right?

01:41 23 A. No.

01:41 24 Q. And as I understand your testimony from this
01:41 25 morning, Dr. Farber, these two settlement agreements

01:41 1 that we've talked about, those are not the basis of
01:41 2 your royalty, right? You didn't rely on those to form
01:41 3 your royalty opinions that you presented to the jury?

01:42 4 A. I did rely on them.

01:42 5 Q. Okay. They weren't the basis for your royalty
01:42 6 rate?

01:42 7 A. They weren't the mathematical basis.

01:42 8 Q. Okay. You considered them and decided they
01:42 9 weren't useful; is that fair?

01:42 10 A. That's fair.

01:42 11 Q. Okay.

01:42 12 MS. MARRIOTT: If we can pull up
01:42 13 Plaintiff's Slide 4.21, please.

01:42 14 BY MS. MARRIOTT:

01:42 15 Q. Now, this is one of the slides that you
01:42 16 presented to the jury this morning about why you didn't
01:42 17 think those licenses were useful; is that true?

01:42 18 A. Yes.

01:42 19 Q. And here on the slide you put an X in the box
01:42 20 the second line down for "Not a settlement agreement."

01:42 21 Do you see that?

01:42 22 A. Yes.

01:42 23 Q. And as I was listening to your testimony, I
01:42 24 believe that you said settlement agreements don't apply
01:42 25 to the hypothetical negotiation.

01:42 1 Do you recall saying that?

01:42 2 A. I recall saying that they're different.

01:42 3 Q. Okay. Okay. So it's not that they don't

01:43 4 apply?

01:43 5 A. It's that you would have to adjust for that --

01:43 6 Q. Okay.

01:43 7 A. -- among other factors.

01:43 8 Q. Great. Because when you -- when I heard

01:43 9 "settlement agreements don't apply to the hypothetical

01:43 10 negotiation," that kind of left me with the impression

01:43 11 that it would always be improper, in your opinion, to

01:43 12 use settlement agreements for the basis of calculating

01:43 13 damages. Is that the impression that you would want me

01:43 14 to have?

01:43 15 A. No. I'm not going to make the claim that

01:43 16 they're always improper to use as the basis for a

01:43 17 damages opinion.

01:43 18 Q. Okay. Because you yourself, Dr. Farber, have

01:43 19 actually used settlement agreements in other cases as

01:43 20 the basis of your damages calculation; isn't that true?

01:43 21 A. Most likely. Yes.

01:43 22 Q. Okay. Just last year, March of 2023?

01:43 23 A. I don't recall exactly what you're talking

01:43 24 about, but perhaps. Yes.

01:43 25 Q. Sure. Sure. I mean, you have a binder in

01:43 1 front of you. There's a tab for one of the cases that
01:43 2 you were in from trial testimony that you gave in March
01:44 3 of 2023.

01:44 4 A. Okay.

01:44 5 Q. Do you recall that?

01:44 6 A. Yes. I do.

01:44 7 Q. Okay. And in that case, your opinion was
01:44 8 based on a settlement agreement. Take a look at Page
01:44 9 97, if you need to refresh your recollection.

01:44 10 A. I recall my primary opinion was regarding lost
01:44 11 profits in this one, but I had an alternative royalty
01:44 12 opinion.

01:44 13 Q. Okay. And that alternative royalty opinion
01:44 14 was based on a settlement agreement, correct?

01:44 15 A. I don't remember if it was a settlement
01:44 16 agreement or not offhand.

01:44 17 Q. Okay. Maybe check -- if you want to refresh
01:44 18 your recollection, you can check Pages 97 and 98.

01:44 19 A. Yep. Just one second.

01:44 20 Q. Sure.

01:44 21 A. Yes. It looks like the royalty I'm discussing
01:45 22 on these pages is a settlement agreement.

01:45 23 Q. Okay. And when you did that, you would start
01:45 24 with the settlement agreement as a starting point for
01:45 25 your royalty rate, correct?

01:45 1 A. Yes. And then you'd adjust for differences.

01:45 2 Q. Yeah. But you do that because it's an actual
01:45 3 transaction; isn't that fair?

01:45 4 A. Yes.

01:45 5 Q. And that's why you started with the market
01:45 6 approach, as you called it, in that case?

01:45 7 A. Yes.

01:45 8 Q. Okay. The market approach tries to ask the
01:45 9 question: How is the license to the patent valued in
01:45 10 the market?

01:45 11 So if you look at the actual transaction
01:45 12 values derived from the license of similar assets,
01:45 13 isn't that the analysis that you did in that case?

01:45 14 A. I -- most likely. I don't recall all the
01:46 15 details, but generally I'd agree with you in general.

01:46 16 Q. Yeah. You don't disagree with that general
01:46 17 statement, right? That's the market approach?

01:46 18 A. Yep.

01:46 19 Q. And you do that because you want to get a
01:46 20 gauge for how the market would value a license to the
01:46 21 patents; isn't that true?

01:46 22 A. Yes.

01:46 23 Q. Okay. And that's the real-life market value,
01:46 24 right?

01:46 25 A. I'm not sure what you're asking with that, the

01:46 1 real-life market value.

01:46 2 Q. Yeah. Market value is what happens in the
01:46 3 real world, right?

01:46 4 A. Yes.

01:46 5 Q. Okay. Now, on this slide and throughout your
01:46 6 testimony, you were mentioning to the jury that there
01:46 7 are differences between settlement agreements and the
01:46 8 hypothetical pretend negotiation that SVV and ASUS
01:46 9 would be having.

01:46 10 Do you recall that discussion?

01:46 11 A. I do.

01:46 12 Q. Okay. And I think you're listing some of them
01:46 13 here on the slide; is that fair?

01:46 14 A. Yes.

01:46 15 Q. Okay. Isn't it true, though, Dr. Farber --
01:47 16 well, actually, let me take a step back. For each of
01:47 17 these rows, you have an X next to them.

01:47 18 Do you see that?

01:47 19 A. Yes.

01:47 20 Q. So does that indicate that you can never
01:47 21 adjust for those, or just that you didn't find the
01:47 22 adjustment to be proper in this case?

01:47 23 A. Neither. This just lists what is different
01:47 24 between the hypothetical negotiation and the
01:47 25 SVV-Samsung agreement.

01:47 1 Q. Okay. So these are just differences?

01:47 2 A. Yes.

01:47 3 Q. Okay. There are always differences between a
01:47 4 settlement agreement license and a hypothetical
01:47 5 negotiation, correct?

01:47 6 A. There's always -- there's almost always some
01:47 7 difference between economic circumstances present at
01:47 8 those negotiations.

01:47 9 Q. Okay.

01:47 10 A. Correct.

01:47 11 Q. And when you have considered settlement
01:47 12 agreements in the past, you've also acknowledged that
01:47 13 what you do as an economist is you account for those
01:47 14 differences, right?

01:47 15 A. To the extent you can. Yes.

01:47 16 Q. Yeah. And you're being compensated by SVV to
01:48 17 be here as an economist, right?

01:48 18 A. My company is being compensated for my time.

01:48 19 Q. Okay. That's fair.

01:48 20 And when you do those adjustments, you have
01:48 21 your starting royalty rate that comes from the
01:48 22 agreement, right?

01:48 23 A. If there is one, yes.

01:48 24 Q. Okay. And that comes from the language of the
01:48 25 agreement, whatever that is, right?

01:48 1 A. And whatever else you know about the
01:48 2 negotiations.

01:48 3 Q. Okay. And then you adjust that royalty rate
01:48 4 based on technical and economic differences as needed,
01:48 5 correct?

01:48 6 A. Yes.

01:48 7 Q. Okay.

01:48 8 MS. MARRIOTT: So if we can go one slide
01:48 9 back, please.

01:48 10 BY MS. MARRIOTT:

01:48 11 Q. So here, on this slide, when you were talking
01:48 12 with the jury about technical comparability and
01:48 13 economic comparability, do you recall that discussion?

01:48 14 A. Yes.

01:48 15 Q. These are the things that you adjust for,
01:48 16 right?

01:48 17 A. If possible, yes.

01:48 18 Q. Yeah. Now, Dr. Farber, do you ever go to the
01:49 19 grocery store?

01:49 20 A. Yes.

01:49 21 Q. Okay. And sometimes we refer to that as "the
01:49 22 market"; is that fair?

01:49 23 A. A supermarket.

01:49 24 Q. A supermarket. Yeah.

01:49 25 Things are for sale and you can buy them,

01:49 1 right?

01:49 2 A. Yes.

01:49 3 Q. Okay. And so I have three kids. And my kids
01:49 4 love apples. And I'm always buying apples constantly.
01:49 5 I think every family has their thing.

01:49 6 Do you ever buy apples at the grocery store?

01:49 7 A. All the time.

01:49 8 Q. Okay. Typically apples are sold by the pound,
01:49 9 right?

01:49 10 A. In a large bag.

01:49 11 Q. Yeah. But they're often in -- just kind of
01:49 12 lined up and you can pick the ones you want and put
01:49 13 them in your bag?

01:49 14 A. Yep.

01:49 15 Q. Yeah. And there's a rate by the pound, right,
01:49 16 for doing that?

01:49 17 A. Yes.

01:49 18 Q. And that would be the market price?

01:49 19 A. It would be one price in the market.

01:49 20 Q. Yeah. That would be that market's price; is
01:50 21 that fair? That particular store?

01:50 22 A. That store's price. Yes.

01:50 23 Q. Yeah. Yes. Now, if you put a lot of big
01:50 24 apples into a bag, okay, you load it up to where it's
01:50 25 almost bursting, that bag's going to be heavier, right?

01:50 1 A. Yes.

01:50 2 Q. And it's more full?

01:50 3 A. Yes.

01:50 4 Q. And you're going to pay more for that big full
01:50 5 bag of apples than you are for maybe a bag of smaller
01:50 6 one to two apples, right?

01:50 7 A. Yes.

01:50 8 Q. Yeah. You would never expect to pay more for
01:50 9 the bag of little tiny apples than you would for the
01:50 10 bag of -- full bag of big apples, right?

01:50 11 A. If they're the same apples, yes. I agree with
01:50 12 you.

01:50 13 Q. Okay. If they were charging you more for that
01:50 14 little bag of apples, you would leave and not buy the
01:50 15 apples, correct?

01:50 16 A. Maybe. Yep. Seems rational.

01:50 17 Q. Yeah. Now, you mentioned the Samsung
01:50 18 settlement agreement to the jury, but I didn't see you
01:50 19 show it.

01:50 20 So I want to show it to you. Okay?

01:50 21 A. Okay.

01:50 22 Q. So we can talk about it.

01:51 23 MS. MARRIOTT: Can we pull up PTX-56,
01:51 24 please?

01:51 25 BY MS. MARRIOTT:

01:51 1 Q. Actually, sorry, Dr. Farber. Would you please
01:51 2 look in your binder?

01:51 3 Do you see PTX-56?

01:51 4 A. Got it.

01:51 5 Q. Okay. Thanks.

01:51 6 Do you recognize this document?

01:51 7 A. It looks like the SVV-Samsung agreement.

01:51 8 Q. Okay.

01:51 9 MS. MARRIOTT: Move to admit PTX-56.

01:51 10 MR. PEARSON: No objection.

01:51 11 THE COURT: Admitted.

01:51 12 MS. MARRIOTT: Thank you.

01:51 13 BY MS. MARRIOTT:

01:51 14 Q. Now, this is the settlement agreement between
01:51 15 Samsung and SVV; is that correct?

01:51 16 A. It looks like it. Yes.

01:51 17 Q. Okay. And at this hypothetical pretend
01:51 18 negotiation that we're talking about between ASUS and
01:51 19 SVV, we would have known about this agreement, right?

01:51 20 A. Yes.

01:51 21 Q. Okay. SVV would have known about it, and ASUS
01:51 22 would have known about it, right?

01:51 23 A. Yes.

01:52 24 MS. MARRIOTT: And if we can go to
01:52 25 Section 3.1. It's on Page 5, please.

01:52 1 BY MS. MARRIOTT:

01:52 2 Q. Here's the payment clause. Right? And they
01:52 3 would have known about this too?

01:52 4 A. Yes.

01:52 5 Q. Okay. And they would have known that Samsung
01:52 6 [REDACTED] for -- to settle the litigation and for
01:52 7 license to the patents, among other things, correct?

01:52 8 A. Yes.

01:52 9 Q. Both sides would have known that, correct?

01:52 10 A. Yes.

01:52 11 Q. Now, you know that ASUS views Samsung as a
01:52 12 competitor; isn't that true?

01:52 13 A. I would guess they do.

01:52 14 Q. And ASUS, it's fair to reason, would not want
01:52 15 to make a decision that puts them at a disadvantage
01:52 16 against one of their competitors, right?

01:52 17 A. I would -- yes. That makes sense.

01:52 18 Q. Okay. And if we look at Page 2 of this
01:52 19 agreement, there's a clause for licensed patents.

01:53 20 This particular license covered 14 patents;
01:53 21 isn't that true?

01:53 22 A. Would you like me to count?

01:53 23 Q. If you'd like, if you don't know.

01:53 24 A. There are 14 in Clause A there.

01:53 25 Q. And those 14 patents include the 4 that we're

01:53 1 talking about here?

01:53 2 A. Yes.

01:53 3 Q. Okay. So this would have been relevant to
01:53 4 both sides. It would have been on the table, right?

01:53 5 A. Yes.

01:53 6 Q. Okay. Now, we were just talking about how
01:53 7 this case involves four patents. That's like a third
01:53 8 of the patents that are involved in this case; isn't
01:53 9 that true?

01:53 10 A. Around there.

01:53 11 Q. And as an economist, you would agree with me
01:53 12 that a party licensing more patents will generally pay
01:53 13 more than a party licensing less of the same for both
01:54 14 patents?

01:54 15 A. All else equal, yes.

01:54 16 Q. All else equal. Okay.

01:54 17 So here, Samsung has more apples, right, more
01:54 18 patents that they're licensing?

01:54 19 A. They have more patents.

01:54 20 Q. And ASUS has less, right?

01:54 21 A. Yes.

01:54 22 Q. Okay. Now, let's talk about products.

01:54 23 MS. MARRIOTT: Can we get up Slide 4.21,
01:54 24 please, from Dr. Farber's?

01:54 25 BY MS. MARRIOTT:

01:54 1 Q. Now, here in your licenses discussion, you
01:54 2 have an X next to licensed products: monitors.

01:54 3 Do you see that?

01:54 4 A. Yes.

01:54 5 Q. Okay. What do you mean by that?

01:54 6 A. At the hypothetical negotiation, they would
01:54 7 discuss monitors. I think 90 of the 91 infringing
01:54 8 products are monitors. And at Samsung there were
01:54 9 monitors and a couple odds and ends beyond that. I
01:54 10 don't recall exactly what they were. I think they were
01:54 11 TVs and a tablet maybe.

01:54 12 Q. Okay. So that X that's there doesn't mean
01:54 13 that Samsung doesn't sell monitors?

01:55 14 A. Correct. It would probably have been more
01:55 15 precise to write licensed products. You know, almost
01:55 16 monitors are monitors only or -- not monitors only.
01:55 17 But yes.

01:55 18 Q. Okay.

01:55 19 A. They sell monitors.

01:55 20 Q. Okay. So Samsung has more than monitors?

01:55 21 A. Yes.

01:55 22 Q. Okay. And I think I saw more than monitors in
01:55 23 your slides for ASUS too, didn't I?

01:55 24 A. They have a Chromebook that is infringing or
01:55 25 accused in this matter.

01:55 1 Q. Yeah. They have more than monitors too,
01:55 2 right?

01:55 3 A. Yes.

01:55 4 Q. And that's a difference we could account for,
01:55 5 isn't it?

01:55 6 A. With the proper evidence, yes.

01:55 7 Q. Okay. Now, given the size of Samsung, they
01:55 8 sell a whole bunch of monitors; isn't that fair?

01:55 9 A. I don't think I know exactly how many monitors
01:55 10 they sell, but I know Samsung is large.

01:55 11 Q. Okay. You didn't look?

01:55 12 A. At one point I did. I just don't know the
01:55 13 number offhand.

01:55 14 Q. Okay. Would you dispute that they sell a
01:56 15 bunch of monitors?

01:56 16 A. No.

01:56 17 Q. Okay. Is Samsung a larger company than ASUS?

01:56 18 A. Generally, yes.

01:56 19 Q. Okay. Does it sell more products than ASUS?

01:56 20 A. Yes.

01:56 21 Q. And just to hit a point that was suggested by
01:56 22 Dr. Vasylyev yesterday, is Samsung still selling LCD
01:56 23 monitors?

01:56 24 A. Yes.

01:56 25 Q. Okay. They're still in the market, right?

01:56 1 A. Yes.

01:56 2 Q. Okay. So this X that you have next to
01:56 3 monitors, it's not that they're not both selling
01:56 4 monitors. It's just maybe they sell different amounts
01:56 5 of monitors; is that fair?

01:56 6 A. There would be a different licensed product
01:56 7 mix.

01:56 8 Q. Okay. Do you know whether Samsung sells more
01:56 9 LCD monitors than ASUS?

01:56 10 A. I don't offhand.

01:56 11 Q. Okay. You don't know?

01:56 12 A. No.

01:56 13 Q. Okay. And obviously ASUS sells monitors.
01:56 14 That's why we're here, right?

01:56 15 A. Yes.

01:56 16 Q. Okay. So Samsung's a bigger company,
01:57 17 generally they'll have more apples than ASUS; is that
01:57 18 fair?

01:57 19 A. They sell more overall products than ASUS.

01:57 20 Q. Yeah. And more licensed products, more
01:57 21 licensed types of products, right?

01:57 22 A. No.

01:57 23 Q. They didn't license all their products?

01:57 24 A. That is -- yes. By the terms of the agreement
01:57 25 licensed, they licensed products.

01:57 1 Q. Yeah. They licensed all their products,
01:57 2 right? All products?

01:57 3 A. Will you point that out to me?

01:57 4 Q. Sure. We can look at the -- we don't have to
01:57 5 put it back up on the screen. You can just take a look
01:57 6 at the second page --

01:57 7 A. Yes. They license all their products.

01:57 8 Q. Okay. Thank you.

01:57 9 And ASUS wouldn't be licensing all their
01:57 10 products, right? Just monitors?

01:57 11 A. And a Chromebook, but yes.

01:57 12 Q. And a Chromebook.

01:57 13 But that's less, right?

01:57 14 A. If a fraction is less than all, yes. I'll
01:58 15 accept that.

01:58 16 Q. Okay. And as an economist, a company that is
01:58 17 selling more products would expect to pay more for the
01:58 18 patents that those products are using than a company
01:58 19 that sells less products. Isn't that a fair statement?

01:58 20 A. Will you repeat the question, please?

01:58 21 Q. Sure. As an economist, a company that's
01:58 22 selling more licensed products is going to pay more for
01:58 23 that license than a company selling less licensed
01:58 24 products?

01:58 25 A. Not necessarily.

01:58 1 Q. Okay. A company could be selling less and be
01:58 2 required to pay more. Is that your testimony?

01:58 3 A. They could be selling less products and be
01:58 4 required to pay more. Yes.

01:58 5 Q. Okay. But you didn't use this market evidence
01:59 6 that we've been talking about to do your analysis -- to
01:59 7 form your royalty rate, correct?

01:59 8 A. It is part of my analysis. It's not the
01:59 9 mathematical basis for my ultimate opinion, if that's
01:59 10 what you're asking.

01:59 11 Q. Okay. And instead, you used what you called a
01:59 12 regression analysis; is that correct?

01:59 13 A. Yes.

01:59 14 Q. Which I think you agreed is the type of
01:59 15 analysis that can be used in things like political
01:59 16 polls, correct?

01:59 17 A. I don't know much about political polls.

01:59 18 Q. So you don't know either way?

01:59 19 A. No.

01:59 20 Q. Okay. And have you concluded, based on this
01:59 21 regression analysis that you did, that ASUS would pay
01:59 22 [REDACTED] more than Samsung?

01:59 23 A. Yes.

01:59 24 Q. For licensing less products?

01:59 25 A. No.

01:59 1 Q. For licensing less patents?

01:59 2 A. Yes.

01:59 3 Q. And for potentially -- I guess you don't know
01:59 4 whether they're licensing less products or not. Is
01:59 5 that your testimony?

01:59 6 A. I want to be a little more precise than that.
02:00 7 The -- the value to the licensee is not necessarily an
02:00 8 account of licensed products. Not all products are --
02:00 9 use the patent technology, but often in an agreement we
02:00 10 see that they license all their products just to be
02:00 11 safe.

02:00 12 Q. Okay. That wasn't my question.

02:00 13 Samsung licensed all their products, right?

02:00 14 A. Yes.

02:00 15 Q. And that is, by definition, more than
02:00 16 licensing just monitors; isn't that fair?

02:00 17 A. Yes.

02:00 18 Q. Okay. So your regression has ASUS paying [REDACTED]
02:00 19 [REDACTED] more for -- than Samsung for licensing less
02:00 20 products, correct?

02:00 21 A. Yes.

02:00 22 Q. Okay. Now, let's talk about how you got to
02:00 23 that number. For starters, you're using a running
02:00 24 royalty structure, correct?

02:00 25 A. Yes.

02:00 1 Q. Okay. And that means for every unit that ASUS
02:00 2 is selling, under your model we would be paying almost
02:01 3 \$14 to SVV, right?

02:01 4 A. Yes.

02:01 5 Q. So for every monitor that's sold, \$14 to SVV?

02:01 6 A. Yes.

02:01 7 Q. And we would kind of keep a running total from
02:01 8 now until whenever the patents expire?

02:01 9 A. Yes.

02:01 10 Q. Okay. That's your analysis?

02:01 11 A. Yes.

02:01 12 Q. Would you agree with me, sir, that SVV in the
02:01 13 real world has never, ever, ever sat down at an actual
02:01 14 negotiation and required the other side to do that?

02:01 15 A. Regarding these patents, I'll agree with you.
02:01 16 I don't know if they have agreements outside of that.

02:01 17 Q. Okay. So for purposes of our discussion
02:01 18 today, just assume that I'm only talking about these
02:01 19 patents. I'm not trying to trick you in that respect.
02:01 20 Okay?

02:01 21 A. Okay.

02:01 22 Q. You would agree with me that never has SVV sat
02:01 23 down at a table and had an actual real-world
02:01 24 negotiation where they made someone agree to this
02:01 25 running royalty?

02:01 1 A. Yes.

02:01 2 Q. Okay. There's no evidence that you presented
02:02 3 to the jury in this case that ASUS has ever agreed to
02:02 4 it either; isn't that true?

02:02 5 A. Yes.

02:02 6 Q. And instead, what we can see in the real-world
02:02 7 evidence is that both of SVV's settlement licenses are
02:02 8 lump sum, right?

02:02 9 A. Yes.

02:02 10 Q. One payment. I think -- I think, actually,
02:02 11 you described it as a paid-up license through the
02:02 12 expiration of the patent, but they pay one time at the
02:02 13 beginning. Is that accurate?

02:02 14 A. Yes.

02:02 15 Q. And that's what they did with Samsung, right?

02:02 16 A. Yes.

02:02 17 Q. And that's what they did with MSI, right?

02:02 18 A. Monetarily, yes.

02:02 19 Q. Okay. And that's the opposite of a running
02:02 20 royalty, correct?

02:02 21 A. It's an alternative.

02:02 22 Q. They're not the same?

02:02 23 A. No.

02:02 24 Q. And it's the -- and a running royalty is
02:02 25 something that neither of these parties has ever done

02:03 1 based on the evidence in this case; isn't that true?

02:03 2 A. Yes.

02:03 3 Q. Okay. Dr. Farber, how many monitors are
02:03 4 accused of infringement in this case, ASUS monitors?

02:03 5 A. Let me clarify, are you talking units or
02:03 6 models?

02:03 7 Q. Models.

02:03 8 A. There are 91 products accused of infringement
02:03 9 in this case.

02:03 10 Q. And that comes from Dr. Credelle?

02:03 11 A. And the stipulation.

02:03 12 Q. Okay. And you know that ASUS sells a lot more
02:03 13 models than just those 91, right?

02:03 14 A. I believe it's -- yes. They sell more than
02:03 15 the 91.

02:03 16 Q. Okay. In fact, your regression, the analysis
02:03 17 that you were doing, one of the key variables is
02:03 18 comparing infringing ASUS monitors to noninfringing
02:03 19 ASUS monitors; is that fair?

02:03 20 A. Yes.

02:03 21 Q. Okay. And that's how you come up with your
02:03 22 cost analysis that you did?

02:03 23 A. Yes.

02:03 24 Q. Okay. And so I think you mentioned that you
02:04 25 were provided data on over 9 million units of ASUS

02:04 1 monitors; is that correct?

02:04 2 A. Yes.

02:04 3 Q. And sitting here today, only 4 million of them
02:04 4 are infringing according to SVV?

02:04 5 A. Yes.

02:04 6 Q. So more than half are noninfringing?

02:04 7 A. Yes.

02:04 8 Q. And the fact that over half of those monitors,
02:04 9 ASUS monitors, do not infringe, that comes from
02:04 10 Dr. Credelle, correct?

02:04 11 A. And the sales data.

02:04 12 Q. Okay. But whether they're infringing or not,
02:04 13 that's going to come from Dr. Credelle, right?

02:04 14 A. Yes.

02:04 15 Q. Okay. And Dr. Credelle's the one who
02:04 16 determined that over half of ASUS monitors do not
02:04 17 infringe even according to him?

02:04 18 A. He provided the model numbers.

02:04 19 Q. That you relied on?

02:04 20 A. Yes.

02:04 21 Q. That he thought were infringing and not
02:04 22 infringing?

02:04 23 A. Yes.

02:04 24 Q. And this fact would also be known if ASUS and
02:04 25 SVV were at a hypothetical negotiation. They would

02:05 1 know that fact too, wouldn't they?

02:05 2 A. Yes. They would.

02:05 3 Q. They would know that ASUS has a lot of other
02:05 4 monitors that it could sell if SVV was going to demand
02:05 5 \$58 million for a license, right?

02:05 6 A. They would -- yes.

02:05 7 Q. And ASUS could have just said, I don't think
02:05 8 that's reasonable. We just won't use those 4 million
02:05 9 monitors and we'll go with the 5 million that don't
02:05 10 infringe, right?

02:05 11 A. Yes. They'd be giving up their share of the
02:05 12 cost savings, but they could do that.

02:05 13 Q. Yeah. They could just transition to the ones
02:05 14 that everyone in this room agrees are noninfringing,
02:05 15 right?

02:05 16 A. Yes. They'd be giving up on the 7.41 per
02:05 17 model, but they could do that.

02:05 18 Q. Okay. And this kind of goes to something else
02:05 19 that you were discussing in your report, and that's the
02:05 20 idea of bargaining power. You know what that is?

02:05 21 A. Yes.

02:05 22 Q. And you would agree with me that if a company
02:05 23 has other choices besides using the allegedly
02:06 24 infringing technology that's going to require them to
02:06 25 pay \$58 million, all else being equal, they would

02:06 1 probably use an alternative, right?

02:06 2 A. I disagree with that characterization there.

02:06 3 Q. Okay. You don't agree with that?

02:06 4 A. No. They'd be giving up on their share of
02:06 5 those cost savings to do so.

02:06 6 Q. But it would be an option?

02:06 7 A. If they were desiring to give up profits, yes.
02:06 8 I suppose they could.

02:06 9 Q. We're going to talk about your cost savings.

02:06 10 The point of that, though, is that ASUS
02:06 11 certainly would have had some bargaining power at the
02:06 12 negotiation, wouldn't they?

02:06 13 A. Sure.

02:06 14 Q. Yeah. They wouldn't have had to have agreed
02:06 15 to a license that wasn't reasonable because they have
02:06 16 some alternatives?

02:06 17 A. Yes. They have alternatives described.

02:06 18 Q. Okay.

02:06 19 MS. MARRIOTT: Can we look at Slide 4.32,
02:06 20 please?

02:06 21 BY MS. MARRIOTT:

02:06 22 Q. Okay. Now I want to talk to you about your
02:06 23 equation on the regression analysis that you did.

02:07 24 On the far left, you have cost, right?

02:07 25 A. Yes.

02:07 1 Q. Okay. And this is just what the entire
02:07 2 monitor costs?

02:07 3 A. Yes.

02:07 4 Q. Okay. So the plastic and everything that goes
02:07 5 with it, the cord, all of it?

02:07 6 A. It's the cost that's in the data ASUS
02:07 7 produced.

02:07 8 Q. Okay. Of the entire monitor, though?

02:07 9 A. I believe so.

02:07 10 Q. Okay. And that's your starting point, fair?

02:07 11 A. That's the dependant variable.

02:07 12 Q. Is that your starting point?

02:07 13 A. I'm not sure I understand the question.

02:07 14 Q. That's what you're comparing. That's -- how
02:07 15 would you describe it?

02:07 16 A. The dependent variable in the regression.

02:07 17 Q. Okay. And what does that mean?

02:07 18 A. That's the outcome we're looking at.

02:07 19 Q. The outcome. Okay. Thank you.

02:07 20 So this entire cost of the monitor, that is
02:07 21 this outcome, okay, that would include things like the
02:07 22 buttons on the screen to adjust things on the monitor?

02:07 23 A. Yes.

02:07 24 Q. Okay. And you would agree that those buttons
02:08 25 have nothing to do with the patented technology,

02:08 1 wouldn't you?

02:08 2 A. I rely on Mr. Credelle for his opinion on how
02:08 3 the patented technology benefits the monitors.

02:08 4 Q. Do you know whether those buttons are accused
02:08 5 of infringing?

02:08 6 A. I just know by product what's accused --
02:08 7 what's accused of infringing.

02:08 8 Q. Are the buttons accused of infringing?

02:08 9 A. I would guess not, but I'm not the expert
02:08 10 here.

02:08 11 Q. Okay. You're not sure?

02:08 12 A. No.

02:08 13 Q. Okay. Did you hear Dr. Credelle say the
02:08 14 buttons were infringing?

02:08 15 A. I did not.

02:08 16 Q. Have you heard the buttons being mentioned at
02:08 17 all in this trial?

02:08 18 A. I don't think so.

02:08 19 Q. Okay. How about the base, like the plastic
02:08 20 stand that the monitor stands on, that would be
02:08 21 included in your cost?

02:08 22 A. Yes.

02:08 23 Q. Have you heard any evidence whatsoever that
02:08 24 that would be infringing?

02:08 25 A. No.

02:08 1 Q. Okay. Or that the plastic stand could be
02:08 2 attributed to the patented technology, we haven't heard
02:09 3 anything like that, have we?

02:09 4 A. We did hear that the benefits could extend to
02:09 5 the plastic stand, I believe.

02:09 6 Q. Okay. So you think the plastic stand is part
02:09 7 of the patented technology?

02:09 8 A. That's not what I said.

02:09 9 Q. Okay. How about the circuit boards in the
02:09 10 monitor? Do you know that -- did you know that there
02:09 11 were circuit boards in the monitor?

02:09 12 A. I'll take your word for it.

02:09 13 Q. Okay. Did you know whether there were?

02:09 14 A. I don't think so.

02:09 15 Q. Okay.

02:09 16 A. No.

02:09 17 Q. Did Dr. Credelle ever tell you that the
02:09 18 circuit boards in the monitor are infringing?

02:09 19 A. No.

02:09 20 Q. Or that they have anything to do with the
02:09 21 patented technology?

02:09 22 A. He explained that the patented technology
02:09 23 extends to the entire monitor.

02:09 24 Q. Okay.

02:09 25 A. So to that extent, they do have something to

02:09 1 do with the patented technology.

02:09 2 Q. Okay. Did Dr. Credelle tell you specifically
02:09 3 the circuit boards have anything to do specifically
02:09 4 with the patented technology?

02:09 5 A. I don't recall him discussing circuit boards.

02:09 6 Q. But you included them in your costs, correct?

02:09 7 A. Yes.

02:09 8 Q. Did Dr. Credelle ever tell you that the liquid
02:10 9 crystal display -- do you know what I'm talking about?

02:10 10 A. Yes.

02:10 11 Q. Okay. That's --

02:10 12 MS. MARRIOTT: May I approach?

13 BY MS. MARRIOTT:

02:10 14 Q. That's this guy, right?

02:10 15 A. Yes.

02:10 16 Q. Did Dr. Credelle ever tell you that this was
02:10 17 part of the allegedly infringing technology?

02:10 18 A. That is a little tougher for me to -- for me
02:10 19 to tell. That's a -- we're getting into the technical
02:10 20 aspects that I don't fully grasp because it's not my
02:10 21 area of expertise.

02:10 22 Q. But you included that in the total cost as
02:10 23 well, correct?

02:10 24 A. Yes. That's in the cost.

02:10 25 Q. Okay. And you're not sure if that's part of

02:10 1 the patented technology or not?

02:10 2 A. I don't know.

02:10 3 Q. You've heard about the backlight module?

02:10 4 A. Yes.

02:10 5 Q. Okay. Is that part of the patented
02:10 6 technology?

02:10 7 A. I believe so.

02:10 8 Q. Okay. So that one we know, right? We know
02:10 9 that that's part of the patented allegedly infringing
02:10 10 technology, right?

02:11 11 A. Yes.

02:11 12 Q. Okay. But that's not where you started.

13 A. Nope.

02:11 14 Q. You didn't start with the backlight, did you?

02:11 15 A. I did not.

02:11 16 Q. You started with the whole thing, right?

02:11 17 A. Yes.

02:11 18 Q. And we -- I think you would agree with me, but
02:11 19 you can let me know, the cost of the entire monitor is
02:11 20 much greater than just the cost component of the sheets
02:11 21 and films and LED lights that we looked at, correct?

02:11 22 A. Yes.

02:11 23 Q. That would probably be a pretty small part of
02:11 24 the cost of the monitor?

02:11 25 A. It would be part of the cost. I don't know

02:11 1 what share. But yes. It would be part of the cost.

02:11 2 Q. Yeah. You don't know how small, but you know
02:11 3 it's not the whole thing?

02:11 4 A. Correct.

02:11 5 Q. Okay. So if you start with the higher number,
02:11 6 the cost of the monitor, versus starting with the low
02:11 7 cost of the backlight panel, all things being equal, by
02:11 8 definition, this regression is just going to show a
02:11 9 higher cost savings, right?

02:11 10 A. No.

02:11 11 Q. If you start with a higher cost, it's not
02:12 12 going to basically figure out the cost savings on that
02:12 13 higher number?

02:12 14 A. It will fair up the cost savings on the unit
02:12 15 as a whole.

02:12 16 Q. Yeah. Not on the backlight module, right?

02:12 17 A. If there were only savings as part of the
02:12 18 backlight module, the regression would be able to show
02:12 19 that.

02:12 20 Q. But you could also have put the backlight
02:12 21 module as the cost of the allegedly infringing
02:12 22 component, correct?

02:12 23 A. No.

02:12 24 Q. Because you didn't know the cost?

02:12 25 A. No.

02:12 1 Q. Okay. Then next on your regression equation
02:12 2 you have infringing.

02:12 3 Do you see that?

02:12 4 A. Yes.

02:12 5 Q. And I believe your testimony was that's a 1 or
02:12 6 a 0. So 1 equals infringing. 0 equals noninfringing.
02:12 7 Is that true?

02:12 8 A. Correct.

02:12 9 Q. And I believe when you were testifying on
02:12 10 direct, you mentioned that in your first attempt at
02:12 11 running this regression, you had classified some of
02:12 12 Dr. Credelle's infringing products as noninfringing.

02:13 13 So some of the 1s were 0s in your first try,
02:13 14 right?

02:13 15 A. Yes. We focused on the product we thought
02:13 16 would be most discussed at the hypothetical
02:13 17 negotiation.

02:13 18 Q. Okay. But not all of the infringing products
02:13 19 were in your model. You left out 30, right?

02:13 20 A. They were in the model, but if you're asking
02:13 21 if they were on -- flags infringing, there were some
02:13 22 left out.

02:13 23 Q. Yeah. They were in the model misclassified as
02:13 24 noninfringing, correct?

02:13 25 A. They were in the control group.

02:13 1 Q. Zeros?

02:13 2 A. They were zeros.

02:13 3 Q. Noninfringing?

02:13 4 A. Yes.

02:13 5 Q. Even though Dr. Credelle had told you that he
02:13 6 thought they were infringing?

02:13 7 A. Yes.

02:13 8 Q. So that was a mistake, right?

02:13 9 A. No.

02:13 10 Q. If it should have been a 1 and you put it as a
02:13 11 0, can we agree that that was wrong?

02:13 12 A. I don't know that it should have been a 1 the
02:13 13 way I was thinking about it at the time.

02:13 14 Q. Okay. Now, a few more questions about your
02:13 15 regression.

02:14 16 You were the one -- you built this model; is
02:14 17 that fair?

02:14 18 A. Yes. My team and I put it together jointly.

02:14 19 Q. Sure. You had some help?

02:14 20 A. Yes.

02:14 21 Q. But you were the one -- you and your team --
02:14 22 when I refer to "you," it's the folks supporting you,
02:14 23 okay?

02:14 24 You were the one that decided which variables
02:14 25 to put in this model, right?

02:14 1 A. Yes.

02:14 2 Q. Okay. And that's the features that we're
02:14 3 looking at. That's the third black box here?

02:14 4 A. Yes. Everything to the right is the variable
02:14 5 we put in the model.

02:14 6 Q. And there's a bunch of stuff below it that we
02:14 7 didn't really talk about, right?

02:14 8 A. Yeah. That's boring math stuff. We can get
02:14 9 in it if you want.

02:14 10 Q. No. That's okay.

02:14 11 Now, maybe I missed it when you were
02:14 12 testifying for the jury, but did I miss you identify
02:14 13 what those features were for the jury in your direct
02:14 14 testimony?

02:14 15 A. I don't think we went through them one by one.
02:14 16 No.

02:14 17 Q. No. We didn't mention them, did we?

02:14 18 A. We talked about the features around the
02:14 19 slides, but I didn't go through them one by one. I
02:15 20 didn't identify what was in there.

02:15 21 Q. Yeah. You didn't show them, right?

02:15 22 A. I think I did show them.

02:15 23 Q. Okay. Now, over time you've tweaked this
02:15 24 model. I think you testified that you tweaked the
02:15 25 model in your direct testimony.

02:15 1 Do you recall that?

02:15 2 A. Yes.

02:15 3 Q. Okay. And you did that to use different
02:15 4 features, right?

02:15 5 A. That was part of it.

02:15 6 Q. And you did that -- so you had one set of
02:15 7 features in your first analysis, right, that you served
02:15 8 to us?

02:15 9 A. Yes.

02:15 10 Q. Okay. And then you made some changes. You
02:15 11 tweaked the model, right?

02:15 12 A. Yes.

02:15 13 Q. And you added some variables, right?

02:15 14 A. We changed two variables.

02:15 15 Q. Okay. And you added one that wasn't really
02:15 16 there before, right? The pixel per inch, that wasn't
02:15 17 really there?

02:15 18 A. We changed them as our measure of resolution.

02:15 19 Q. Okay. So you tweaked the model, and lo and
02:16 20 behold, your number went up, didn't it?

02:16 21 A. It did.

02:16 22 Q. Yeah. Just by tweaking that model? All
02:16 23 things being equal otherwise, correct?

02:16 24 A. Yes.

02:16 25 Q. And that's not all of your updates, was it, to

02:16 1 this -- to this kind of evolving regression that you're
02:16 2 talking about with the jury today. Just last Friday
02:16 3 you changed your data again; isn't that correct?

02:16 4 A. The royalty base changed for the stipulation
02:16 5 on the new data produced by ASUSTeK.

02:16 6 Q. Okay. That wasn't my question.

02:16 7 You changed the data inputs, correct?

02:16 8 A. Into the regression? Is that what you're
02:16 9 asking?

02:16 10 Q. You changed products from not infringing to
02:16 11 infringing. Zero to one.

02:16 12 A. No.

02:16 13 Q. You changed several products, didn't you, sir,
02:16 14 that you originally had as 0s the first time you served
02:17 15 your model on us, and you changed them to 1s, correct?

02:17 16 A. I'm sorry. Were you talking about the
02:17 17 regression still?

02:17 18 Q. I'm talking about your data.

02:17 19 A. Okay. To clarify, we did not issue a new
02:17 20 regression this past week. If you're talking about the
02:17 21 royalty base, yes, I updated it for the new data in the
02:17 22 stipulation the parties agreed to.

02:17 23 Q. Ah, thank you for the clarification. Okay.

02:17 24 MS. MARRIOTT: We can take this
02:17 25 regression down. Thank you. I don't want it to be

02:17 1 confusing.

02:17 2 BY MS. MARRIOTT:

02:17 3 Q. Okay. So the data, it changed again last
02:17 4 Friday, right?

02:17 5 A. Yes.

02:17 6 Q. Okay. And some of the products that were
02:17 7 zeros and had been zeros for the last year,
02:17 8 noninfringing, right?

02:17 9 A. Yes.

02:17 10 Q. You changed those to ones as infringing?

02:17 11 A. Yes.

02:17 12 Q. Did Dr. Credelle tell you to do that?

02:17 13 A. No.

02:17 14 Q. He didn't ever look at those products and
02:17 15 determine that they were actually infringing; isn't
02:17 16 that true?

02:17 17 A. I don't know.

02:17 18 Q. Is that important to you whether Dr. Credelle
02:17 19 thinks they're infringing?

02:17 20 A. Yes. It is. I also was trying to abide by
02:18 21 the agreement between the parties.

02:18 22 Q. Did Dr. Credelle ever tell you that those
02:18 23 products were infringing?

02:18 24 MR. PEARSON: Your Honor, may we
02:18 25 approach?

02:18 1 THE COURT: Yes.

02:18 2 (Bench conference.)

02:18 3 MR. PEARSON: She's cross-examining this
02:18 4 witness on whether Dr. Credelle gave him specific
02:18 5 instructions about the parties' stipulations. Of
02:18 6 course he followed the parties' stipulation in
02:18 7 constructing his royalty base.

02:18 8 It's not improper, and I think it's an
02:18 9 improper line of questioning to suggest that he did
02:18 10 something wrong in following the agreement that both
02:18 11 parties entered into willingly.

02:18 12 MS. MARRIOTT: So I think, Your Honor,
02:18 13 this is the product stipulation motion that we filed
02:18 14 over the weekend. Those products were added into the
02:18 15 case. Your Honor allowed them to do that but said we
02:19 16 can make the record about kind of what they -- you
02:19 17 know, we had to siphon off what they were. This is
02:19 18 what they were. No one's ever looked at these
02:19 19 products.

02:19 20 THE COURT: But this is the parties'
02:19 21 stipulation?

02:19 22 MR. PEARSON: Yes, Your Honor.

02:19 23 THE COURT: No. My ruling on saying as
02:19 24 long as they were in the same manufacturing number --
02:19 25 there was something.

02:19 1 MR. PEARSON: My understanding was in
02:19 2 order for them to make their record, I had to have him
02:19 3 say the number of units that were at issue and he did.
02:19 4 And that was the end of the ruling and the motion was
02:19 5 denied otherwise.

02:19 6 THE COURT: And so I'm going to sustain
02:19 7 the objection. There's no point in going through this
02:19 8 and making him look like he did something wrong. The
02:19 9 point of my ruling was to allow them to be segregated
02:19 10 out, and I think that's -- that's what -- I'll sustain
02:19 11 the objection.

02:19 12 MR. PEARSON: Thank you, Your Honor.

02:19 13 MS. MARRIOTT: Thank you, Your Honor.

02:19 14 (Bench conference concludes.)

02:19 15 BY MS. MARRIOTT:

02:19 16 Q. All right, Dr. Farber. I want to talk to you,
02:20 17 finally, about your ultimate conclusion. Okay?
02:20 18 \$58 million. That's your ultimate conclusion for
02:20 19 damages, correct?

02:20 20 A. Yes. Around there.

02:20 21 Q. Okay. And maybe I missed it, but I think
02:20 22 that's the only damages number that I saw you present
02:20 23 to the jury, correct?

02:20 24 A. We presented damages under indirect
02:20 25 infringement as well.

02:20 1 Q. Correct. Okay. Let's just talk about the
02:20 2 direct infringement number. It was just \$58 million
02:20 3 approximately.

02:20 4 A. Yep. We can round.

02:20 5 Q. Okay. And that number, it's fair to say,
02:20 6 assumes that the jury finds all four patents to be
02:20 7 infringed; isn't that correct?

02:20 8 A. Yes.

02:20 9 Q. Now, the jury may very well find none of the
02:20 10 patents infringe, right?

02:20 11 A. Yes.

02:20 12 Q. They could just find one of the patents
02:20 13 infringe, correct?

02:20 14 A. Yes.

02:20 15 Q. Two?

02:20 16 A. Yes.

02:20 17 Q. If there was none, there would be no damages,
02:20 18 correct?

02:20 19 A. Correct.

02:20 20 Q. And, you know, we've been talking throughout
02:21 21 this trial --

02:21 22 MS. MARRIOTT: Actually, can we pull up
02:21 23 PTX-652, please?

02:21 24 BY MS. MARRIOTT:

02:21 25 Q. Do you recall showing this exhibit to the

02:21 1 jury?

02:21 2 A. I do.

02:21 3 Q. Okay. And if I understood your testimony, it
02:21 4 was that the jury could look at this particular
02:21 5 document and figure out which patents -- how to figure
02:21 6 out on a patent -- per-patent basis what damages would
02:21 7 be; is that fair?

02:21 8 A. Yes.

02:21 9 Q. Okay. And they would, I guess, do that by
02:21 10 looking at the infringed patents column?

02:21 11 A. Yes. This tells them which products infringe
02:21 12 which patents.

02:21 13 Q. Okay. And then there was, I think, another
02:22 14 attachment that you showed that had the sales?

02:22 15 A. Yes.

02:22 16 Q. And so then they would add up the sales?

02:22 17 A. Yes. They could do that.

02:22 18 Q. And then multiply it by your royalty rate? Is
02:22 19 that how this would work?

02:22 20 A. Yes.

02:22 21 Q. Okay. Now, assume with me just hypothetically
02:22 22 that the jury finds just one of the light -- those
02:22 23 light-trapping patents -- I know we've talked about
02:22 24 categories. So I don't mean anything other than it's
02:22 25 just that -- that set of patents. Okay?

02:22 1 A. Okay.

02:22 2 Q. Let's say the '318 to be infringed. Let's say
02:22 3 only the '318 is infringed and no other patents are
02:22 4 infringed. Okay? Are you with me on that?

02:22 5 A. Yes.

02:22 6 Q. If that was the case, you don't think the jury
02:22 7 should award \$58 million, correct?

02:22 8 A. Do you mind if I consult my attachments here?

02:22 9 Q. Sure.

02:22 10 A. I have the numbers somewhere.

02:22 11 Q. Yep.

02:23 12 A. I believe that the number would decrease
02:23 13 slightly.

02:23 14 Q. Okay. Slightly.

02:23 15 Isn't it true that SVV is only accusing four
02:23 16 out of the 91 monitors you mentioned of infringing that
02:23 17 '318 patent?

02:23 18 A. Oh, yes. I'm sorry. If it's still only four,
02:24 19 it would decrease more than slightly. Yes.

02:24 20 Q. I'm sorry. I didn't catch that.

02:24 21 A. If it's only four products, then damages would
02:24 22 decrease more than slightly.

02:24 23 Q. Okay. More than slightly.

02:24 24 So there's only four monitors accused of
02:24 25 infringing that patent, correct? The '318?

02:24 1 A. I'm trying to count, but there's a lot of
02:24 2 products on the list. I'll take your word for it, if
02:24 3 that's okay.

02:24 4 Q. So you haven't looked at the issue just
02:24 5 specifically, but for purposes of today, you don't have
02:25 6 any reason to believe that's untrue?

02:25 7 A. No. That sounds about right.

02:25 8 Q. Okay. And the total revenues -- I don't
02:25 9 expect you to know this answer, but maybe you do. The
02:25 10 total revenues on those four products are like
02:25 11 9.5 million, okay? That's total revenue for those four
02:25 12 products. Okay?

02:25 13 A. Okay.

02:25 14 Q. It would make no sense at all, would it, for
02:25 15 ASUS to pay five times the amount of total revenue for
02:25 16 products for a license to these patents, correct?

02:25 17 A. No. My opinion on that point would not be
02:25 18 58 million. It would be 13.96 times the number of
02:25 19 accused -- of unit sales of those four products.

02:25 20 Q. Okay. And this wasn't something that you gave
02:25 21 to the jury on direct, right? This is new information?

02:25 22 A. We explained how they would do it.

02:25 23 Q. That would be like \$215,000, if I'm doing the
02:25 24 math?

02:25 25 A. I don't know offhand. Would you like me to

02:25 1 calculate it?

02:25 2 Q. No. That's okay.

02:25 3 And that's the truth, right? You would just
02:25 4 multiply the units by the rate, correct, to get your
02:26 5 rate? To get your damages for a per-patent basis?

02:26 6 A. Yes.

02:26 7 Q. Okay. Now, let's assume with me that the '319
02:26 8 (sic) and the '018 (sic), so both of the patents in
02:26 9 that category, okay? Assume with me that the jury
02:26 10 finds both of those infringed. If that was the case,
02:26 11 the jury shouldn't award \$58 million either, correct?

02:26 12 A. It looks like it's a subset of the accused
02:26 13 products that infringe those patents, so you'd want --
02:26 14 you'd follow the same process.

02:26 15 Q. Yeah. Just five of them, right? Five out of
02:26 16 91, correct?

02:26 17 A. To save the jury and everyone else me
02:26 18 counting, I'll take your word for it.

02:26 19 Q. That would be like \$300,000, right, under your
02:26 20 methodology?

02:26 21 A. Sure.

02:26 22 Q. Okay. And you didn't tell the jury that
02:26 23 either on direct, did you?

02:26 24 A. No. I assumed the patents are infringed and
02:26 25 valid as part of my analysis.

02:26 1 MS. MARRIOTT: Okay. I pass the witness.

02:27 2 REDIRECT EXAMINATION

02:27 3 BY MR. PEARSON:

02:27 4 Q. Dr. Farber, let's sort of go in reverse order
02:27 5 a little bit and begin with your -- with her questions
02:27 6 about your regression. Is that okay?

02:27 7 A. Sure.

02:27 8 Q. There was a little bit of discussion about --
02:27 9 I think it was characterized as you tweaked the model
02:27 10 and it went up.

02:27 11 Do you recall that?

02:27 12 A. Yes. I do.

02:27 13 Q. And you discussed the reasons for that in your
02:27 14 direct testimony, didn't you, about why you ran a first
02:27 15 regression and a second regression?

02:27 16 A. I did.

02:27 17 Q. During cross-examination, did counsel point
02:27 18 out that there were any errors in anything that was
02:28 19 characterized as a tweak?

02:28 20 A. I don't think so.

02:28 21 Q. We saw your regression -- or your regression
02:28 22 equation again.

02:28 23 Do you remember that?

02:28 24 A. Yes.

02:28 25 Q. And there's some discussion about how you used

02:28 1 a lot of variables in doing your regression?

02:28 2 A. Yes.

02:28 3 Q. Did you intend anything nefarious in not
02:28 4 listing out the many variables you considered by name
02:28 5 in your regression equation?

02:28 6 A. No. Tried to gloss over the more tedious
02:28 7 stuff, but it's in the demonstratives we provided.

02:28 8 Q. So counsel doesn't think we left anything out,
02:28 9 will you please turn to your appropriate Attachment G
02:28 10 and let us know what variables you considered in your
02:28 11 regression, please?

02:28 12 A. We included year of production; year since
02:29 13 release; monitor category, and that being general use,
02:29 14 professional use, commercial use, gaming use; panel
02:29 15 type, and that being TN, VA, or IPS; whether the
02:29 16 monitor is QLED; whether it has a sync feature that has
02:29 17 a camera; whether it has one of a couple of eye care
02:29 18 features; one of -- whether it has low blue light;
02:29 19 whether it has flicker-free; whether it has extreme
02:29 20 low-motion blur; whether it has color accuracy; its
02:29 21 size; its refresh rate; its brightness; its response
02:29 22 time; pixels per inch; whether it's infringing; and
02:29 23 interaction of whether it's infringing and whether it's
02:29 24 QLED; and a constant.

02:29 25 Q. Thank you, Dr. Farber.

02:29 1 There was a line of questioning I couldn't
02:29 2 quite follow about the stipulation and units in your
02:30 3 royalty base.

02:30 4 But did counsel show any evidence that your
02:30 5 royalty base does not accurately follow the
02:30 6 stipulation, the agreement between the parties, that if
02:30 7 the jury finds infringement, if, then these are the
02:30 8 models that the jury will find are infringing?

02:30 9 A. I don't recall any.

02:30 10 Q. There was some discussion about your
02:30 11 regression, about how you began with the entire cost of
02:30 12 the monitor and used the entire cost of the monitor
02:30 13 when you ran your regression.

02:30 14 Do you recall that?

02:30 15 A. Yes.

02:30 16 Q. And there was sort of a laundry list of
02:30 17 components within the monitor that I guess counsel was
02:31 18 trying to imply you could have used the costs from
02:31 19 those components in your regression.

02:31 20 Do you recall that?

02:31 21 A. Yes.

02:31 22 Q. And I recall one of them was the backlight
02:31 23 unit.

02:31 24 Do you remember that?

02:31 25 A. Yes.

02:31 1 Q. And to be clear, did ASUS provide SVV with any
02:31 2 information about the cost that it pays for the
02:31 3 backlight units in its infringing monitors?

02:31 4 A. No. The data we got had their overall cost
02:31 5 per monitor, not of the subset of pieces.

02:31 6 Q. And it seems like ASUS was fair in its
02:31 7 nonsharing of information, because I don't believe
02:31 8 counsel for ASUS said anything about how much the
02:31 9 backlight unit cost.

02:31 10 Do you recall that?

02:31 11 A. I don't recall any -- any figures. No.

02:31 12 Q. And I believe you said you used -- if I recall
02:31 13 your direct testimony correctly, that you used the
02:32 14 entire cost of the monitor in your regression because
02:32 15 it's your understanding that the benefits of the
02:32 16 patents extend to the whole monitor; is that fair?

02:32 17 A. Yes. I relied on Mr. Credelle for that.

02:32 18 Q. And that would still -- is that still true
02:32 19 even if the mechanical elements of infringing are not
02:32 20 necessarily found in every component in the monitor?

02:32 21 A. Yes. It's my understanding with Mr. Credelle
02:32 22 that though the patented technology may reside on one
02:32 23 piece, the benefits extend outside of that to the
02:32 24 entire monitor.

02:32 25 Q. And it sounded like during cross-examination

02:32 1 one idea that you had in mind but didn't get to fully
02:32 2 explain was the plastic stand that's associated with
02:32 3 the monitor.

02:32 4 Could you explain that to the jury?

02:32 5 A. Yes. I'm not a technical expert, but the
02:32 6 patented technology does not appear to reside in the
02:32 7 patent -- in the stand of the monitor.

02:32 8 However, I think we heard from Mr. Credelle
02:32 9 that the patented -- the patented technology allows
02:33 10 them to use fewer components, thinner components,
02:33 11 smaller components, and so if the monitor's thinner and
02:33 12 weighs less, you can use a less expensive stand to
02:33 13 support that monitor.

02:33 14 Q. And that is a type of cost savings as a whole
02:33 15 that is captured by your regression; is that fair?

02:33 16 A. Yes.

02:33 17 Q. Another criticism that I heard, if I recall
02:33 18 correctly, is that certain models -- I believe counsel
02:33 19 was trying to say in your original regression, but I'm
02:33 20 not sure.

02:33 21 Certain models were misclassified or there was
02:33 22 a mistake and they were marked as not infringing when
02:33 23 they should have been infringing.

02:33 24 Do you recall that?

02:33 25 A. Yes. I do.

02:33 1 Q. And I believe you testified on
02:33 2 cross-examination that that was not a mistake; is that
02:33 3 fair?

02:33 4 A. Yes. That's fair.

02:33 5 Q. And why is it not a mistake?

02:33 6 A. I -- with my first regression, I tried to
02:33 7 focus on the products I thought the parties would
02:33 8 negotiate over, the primary accused products. And
02:34 9 they're not going to negotiate over every last unit.

02:34 10 And I think that's reasonable. There's just a
02:34 11 lot of units here. So I focused on a set of them, and
02:34 12 I -- it's not a mistake. It's that's what I thought
02:34 13 they would focus on as part of the regression.

02:34 14 Q. And how did you choose the ones that you
02:34 15 thought they would focus on as that set?

02:34 16 A. I based it on the set that Mr. Credelle
02:34 17 charted for the most part.

02:34 18 Q. So the infringement charts like ASUS was
02:34 19 asking for before the litigation was filed?

02:34 20 A. Yes. I think we saw that in the letters. I
02:34 21 also excluded from that portable monitors and
02:34 22 Chromebooks, because those are such a small share of
02:34 23 the accused products. I thought that they'd focus on
02:34 24 the ones that are most representative of the total set.

02:34 25 Q. Well, what would the effect have been on your

02:34 1 regression if ASUS' contention was correct and a
02:34 2 monitor that should have been flagged as infringing was
02:34 3 flagged as noninfringing?

02:34 4 A. Generally, this goes to something called
02:34 5 attenuation bias, and it biases your results down
02:35 6 towards zero if you misclassify -- not misclassify --
02:35 7 but put products in the wrong bucket between A and B.

02:35 8 If you mix them up a little bit, that
02:35 9 coefficient you saw that was negative 21.85 would
02:35 10 decrease towards zero. That's an economic concept.
02:35 11 And it also would have -- no. That's it.

02:35 12 Q. I tried to make notes of the criticisms of
02:35 13 your regression, and I tried to go through them with
02:35 14 you. If I missed any, I apologize.

02:35 15 Is there anything else that you just feel the
02:35 16 burning need to say in defense of your regression?

02:35 17 A. I don't think so.

02:35 18 Q. Okay. The other -- the other sort of, I'd
02:35 19 say, major part of the cross-examination had to do with
02:35 20 the SVV and Samsung license agreement.

02:35 21 Do you remember that?

02:35 22 A. I do.

02:35 23 Q. And there's a lot of discussion about how it
02:35 24 would have been considered at the hypothetical
02:35 25 negotiation.

02:35 1 Do you remember that?

02:35 2 A. Yes.

02:35 3 Q. And I believe a few times it was called a
02:36 4 pretend negotiation.

02:36 5 Do you remember that?

02:36 6 A. Yes.

02:36 7 Q. Did you -- and I know you said this on direct,
02:36 8 but could you remind the jury, did you come up with the
02:36 9 concept and the requirements of the hypothetical
02:36 10 negotiation?

02:36 11 A. No. I think that's something only lawyers
02:36 12 could have come up with.

02:36 13 Q. You found it in the case law?

02:36 14 A. Yes.

02:36 15 Q. And you're required to follow it?

02:36 16 A. Yes.

02:36 17 Q. It sounded to me -- I was doing my best to
02:36 18 follow. There was an extended analogy about apples.

02:36 19 Do you remember that?

02:36 20 A. Yes.

02:36 21 Q. As best I could follow it, it sounded like
02:36 22 counsel was trying to argue that because Samsung sells
02:36 23 a lot of apples or monitors, and they didn't pay
02:36 24 \$58 million, that ASUS should get some sort of
02:37 25 proportional discount because ASUS is selling a smaller

02:37 1 bag of apples or something.

02:37 2 Does that sound about right?

02:37 3 A. Yes.

02:37 4 Q. Okay. Did you hear Dr. Vasylyev testify
02:37 5 earlier in this case that his investigation found that
02:37 6 SVV's inventions were used in far fewer Samsung
02:37 7 monitors than ASUS monitors?

02:37 8 A. Yes. I think he testified there were seven
02:37 9 models maybe.

02:37 10 Q. So I guess part of the proportion ride is in
02:37 11 order to make the argument work, you got to -- you got
02:37 12 to make sure the number of Samsung units is really big.
02:37 13 We got to prove it's a big bag to make the apple
02:37 14 analogy work.

02:37 15 Does that sound about right?

02:37 16 A. I think I'm following you.

02:37 17 Q. So there was some discussion with you about
02:38 18 whether the Samsung patent license actually licensed
02:38 19 all Samsung products or didn't.

02:38 20 Do you remember that?

02:38 21 A. I do.

02:38 22 Q. And she -- and counsel showed the license, I
02:38 23 believe. I believe she showed this provision in the
02:38 24 definitions and had you agree that all Samsung products
02:38 25 are licensed.

02:38 1 Do you remember that?

02:38 2 A. Yes. They all fall under that definition.

02:38 3 Q. That's all products?

02:38 4 A. Yes. It reads --

02:38 5 Q. The license doesn't say all monitors?

02:38 6 A. No. It says all products.

02:38 7 Q. Do you know whether Samsung sells washing
02:38 8 machines?

02:38 9 A. I own one. Yes.

02:38 10 Q. Do you know whether Samsung sells
02:38 11 refrigerators?

02:38 12 A. Yes. They do.

02:38 13 Q. Do you have any reason to believe the patented
02:38 14 technology has anything to do with those other types of
02:38 15 Samsung products that don't even have a screen?

02:38 16 A. Some people have screens on their fridges, but
02:39 17 for the most part, without a screen, I don't have any
02:39 18 reason to believe it would be implicated.

02:39 19 Q. So when trying to determine the value that
02:39 20 Samsung obtained from the Samsung agreement, wouldn't
02:39 21 it be fair to try and figure out how many Samsung
02:39 22 units, monitors or TVs, other types of products
02:39 23 actually used SVV's patents?

02:39 24 A. Yes. That's the value that would be
02:39 25 negotiated over at the SVV-Samsung negotiations leading

02:39 1 to that agreement.

02:39 2 Q. During your cross-examination, did counsel
02:39 3 show you the number of Samsung units that actually use
02:39 4 SVV's technology?

02:39 5 A. No.

02:39 6 Q. But once we consider washing machines, vacuum
02:39 7 cleaners, a lot of other things, we can all agree with
02:39 8 common sense that Samsung does sell a lot of products,
02:39 9 right?

02:39 10 A. Yes. They do.

02:39 11 Q. It sort of sounded like ASUS was hoping to get
02:40 12 the same deal that Samsung got, right?

02:40 13 A. That was the implication.

02:40 14 Q. Did you find that curious?

02:40 15 A. A bit.

02:40 16 Q. Do you remember when counsel for ASUS said
02:40 17 that Samsung didn't even take a license voluntarily?

02:40 18 A. Yes.

02:40 19 Q. And do you remember when -- or a few minutes
02:40 20 ago, counsel said: Companies -- this is my notes. It
02:40 21 might not be a direct quote. Companies settle lawsuits
02:40 22 all the time because it's expensive to be sued?

02:40 23 A. Yes. I do remember that.

02:40 24 Q. Isn't it unusual for ASUS to argue on the one
02:41 25 hand that the Samsung agreement is irrelevant because

02:41 1 it came from litigation and they were just trying to
02:41 2 get out of something, and on the other hand to say
02:41 3 we're not going to settle, but we sure want the same
02:41 4 deal as that guy?

02:41 5 A. Yeah. The goal of the market approach is to
02:41 6 figure out the market price for -- of -- the market
02:41 7 value of a license to the patents. If the agreement
02:41 8 was negotiated and all that monetary compensation was
02:41 9 related to the cost of litigation or just to get out of
02:41 10 the lawsuit, then it doesn't represent the value of a
02:41 11 license to the patents-in-suit.

02:41 12 Q. But to be fair, we do all agree that in
02:41 13 certain circumstances, and you testified to this on
02:41 14 your direct examination, that in certain circumstances
02:41 15 when sufficiently reliable data exists, it is okay to
02:41 16 look at settlement licenses?

02:41 17 A. Yes. We go where the evidence points us,
02:41 18 where the best evidence is. So sometimes that's what
02:42 19 you have to work with and you adjust as you can.

02:42 20 Q. Can you please remind the jury, in your expert
02:42 21 opinion in this case, is a more reliable basis for
02:42 22 damages the SVV-Samsung patent license agreement and
02:42 23 doing some sort of proportion or your extreme and
02:42 24 sophisticated regression analysis?

02:42 25 A. I believe the income approach, you know, where

02:42 1 I perform my regression analysis, is more accurate. It
02:42 2 measures the benefits to ASUS specifically and does not
02:42 3 get into the problems presented within the SVV-Samsung
02:42 4 agreement for which I can't adjust.

02:42 5 MR. PEARSON: Pass the witness,
02:42 6 Your Honor.

02:42 7 MS. MARRIOTT: No further questions,
02:42 8 Your Honor.

02:42 9 THE COURT: You may step down.
02:42 10 You may call your next witness.

02:42 11 MR. CALDWELL: Your Honor, the plaintiff
02:42 12 calls adverse Mr. James Lee, the corporate
02:42 13 representative for ASUSTeK.

02:44 14 (Interpreter was sworn.)

02:44 15 (The witness was sworn.)

16 MR. CALDWELL: May I proceed, Your Honor?

17 THE COURT: Please.

18 MR. CALDWELL: Thank you.

02:44 19 DIRECT EXAMINATION

02:44 20 BY MR. CALDWELL:

02:45 21 Q. Good afternoon. I'm Brad Caldwell, one of the
02:45 22 lawyers for SVV and Dr. Vasylyev.

02:45 23 Now, this is a little bit different than the
02:46 24 other witnesses we've seen because although I represent
02:46 25 SVV, you are a witness for ASUSTeK, correct?

02:46 1 A. Yes.

02:46 2 Q. Because it's a little unusual for me to call a
02:46 3 witness from the other side, at least compared to the
02:46 4 other witnesses we've seen, I would like to give you an
02:46 5 opportunity to introduce yourself.

02:46 6 So just to be fair in that respect, will you
02:46 7 please take a minute and introduce yourself to the
02:46 8 jury?

02:46 9 A. Okay. Hi, everyone. My name is James Lee.
02:47 10 I'm living in Taiwan. And I currently work in ASUS.
02:47 11 And I have a wife and a eight-years-old daughter. So I
02:47 12 like to play with my daughter in a weekend. So
02:47 13 sometime I will teaching him to swimming and to ride a
02:47 14 bicycle, and he likes to play skittle ball and also
02:47 15 like painting. So normally I will --

16 (Clarification by Reporter.)

17 A. Sorry. So sometimes I will take my girl to a
18 painting class.

02:47 19 THE COURT: So we're going to have to
02:47 20 do -- we have translators. We're going to have to --
02:47 21 we need you to speak in Mandarin and have it translated
02:47 22 so the court reporter can take it down. So if you
02:48 23 would speak in -- is it Mandarin? And then allow your
02:48 24 translator to translate.

02:48 25 THE INTERPRETER: Okay. That's fine.

02:48 1 And that was my introduction.

02:48 2 (Clarification by Reporter.)

02:48 3 THE COURT: He needs to do it again so we
02:48 4 can record it.

02:48 5 A. Good afternoon, everyone. I'm happy to be
02:48 6 here. My name is James. I'm from Taiwan. And I work
02:49 7 at ASUS now. I have a wife and an eight-year-old
02:49 8 child. She is a little girl, and she likes to draw.
02:49 9 So I sometimes go with her to her art classes.

02:49 10 On the weekends I like to spend time with my
02:49 11 child, my daughter, and so sometimes we go to play
02:49 12 sports together too.

02:49 13 Thank you, everyone.

02:49 14 BY MR. CALDWELL:

02:49 15 Q. Welcome to Texas.

02:49 16 A. No problem.

02:49 17 Q. When did you get here to Texas?

02:49 18 A. Last Monday.

02:50 19 Correction. Last Friday. It was the middle
02:50 20 of last Friday night.

02:50 21 Q. You are a division chief in the business unit
02:50 22 of monitors, correct?

02:50 23 A. Yes.

02:50 24 Q. And you are sometimes referred to as a product
02:50 25 planner, correct?

02:50 1 A. Yes.

02:50 2 Q. Okay. And it was not SVV that picked you as a
02:50 3 witness. It was ASUSTeK that picked you to be here as
02:50 4 a witness, correct?

02:50 5 A. Correct.

02:51 6 Q. Did you want to come to trial?

02:51 7 A. Yes. I did. I wanted to be able to be here
02:51 8 in person and explain my case to the jury.

02:51 9 Q. Okay. Now, please understand when I ask you
02:51 10 questions, it's kind of like when your lawyers would
02:51 11 ask questions of Dr. Vasylyev. So if I'm asking you
02:51 12 cross-examination-type questions, I mean you no
02:51 13 disrespect.

02:51 14 Do you understand that?

02:51 15 A. I understand.

02:52 16 Q. And let's see if we can agree on a few basic
02:52 17 things. So how many patents are at issue in this
02:52 18 trial?

02:52 19 A. Four.

02:52 20 Q. And do you know how many claims are at issue
02:52 21 in this trial?

02:52 22 A. I haven't counted them up.

02:52 23 Q. When we last -- when SVV last spoke with you
02:52 24 at your deposition, you had not read the patents,
02:53 25 correct?

02:53 1 A. I had looked at them a little bit.

02:53 2 Q. Okay. Did you ever read them completely?

02:53 3 A. No. Before then, I had not read them
02:53 4 completely.

02:53 5 Q. I'm asking after your deposition, did you ever
02:53 6 get around to reading them completely?

02:53 7 A. I did go to look at them myself after, but
02:54 8 because they were quite technical, I discussed them
02:54 9 with the engineers.

02:54 10 Q. And you know that they relate to the backlight
02:54 11 unit portion of a monitor, correct?

02:54 12 A. Yes. I learned that from speaking with the
02:54 13 engineers.

02:54 14 Q. So in your role in product planning, some of
02:54 15 the things that you know about are product
02:54 16 specifications, pricing, timing, appearance, and
02:54 17 packaging, correct?

02:54 18 A. Yes.

02:55 19 Q. And in your role, you kind of know about the
02:55 20 parts of a monitor that are -- everything except the
02:55 21 actual technical engineering on the inside, right?

02:55 22 A. Correct.

02:55 23 Q. Who were the engineers that you talked to
02:55 24 about the patents?

02:55 25 A. ASUS engineers.

02:55 1 Q. Who were they?

02:56 2 THE INTERPRETER: The interpreter would
02:56 3 like to ask for a clarification.

02:56 4 A. They were from the displays department and
02:56 5 from legal affairs.

02:56 6 BY MR. CALDWELL:

02:56 7 Q. What were their names?

02:56 8 A. Jason Wu.

02:56 9 Q. Anyone else?

02:56 10 A. Yu, Chia-Lei. Justin Lee.

11 (Clarification by Reporter.)

02:56 12 THE INTERPRETER: Two different names.

02:56 13 Last name U -- pinyin spelling is Y-u, first name

02:56 14 J-i-a-l-e-i. The Taiwan spelling may be different.

02:57 15 Justin?

02:57 16 THE WITNESS: Lee.

17 THE INTERPRETER: Lee. Justin Lee.

02:57 18 BY MR. CALDWELL:

02:57 19 Q. Are any of those ASUS technical people going
02:57 20 to make the trip to the United States to testify in
02:57 21 court?

02:57 22 A. As far as I know, they looked for technical
02:57 23 people here in the United States for this purpose.

02:57 24 Q. My question is, are any of the ASUS technical
02:57 25 people that you talked to going to come to court to

02:57 1 testify?

02:57 2 A. As far as I know, no.

02:58 3 Q. And you, Mr. Lee, do not know what
02:58 4 technologies have incorporated into ASUS display
02:58 5 panels, correct?

02:58 6 A. I have a basic understanding only.

02:58 7 Q. But you would agree, consistent with your
02:58 8 prior testimony, that you don't know what exact
02:58 9 technologies are incorporated in the display panels,
02:58 10 correct?

02:58 11 A. For the last testimony I gave, I had not done
02:59 12 in-depth research or did not have an in-depth
02:59 13 understanding of them, but for this occasion, I did
02:59 14 prepare more.

02:59 15 Q. So when we sent you a deposition notice to
02:59 16 testify, asking for your testimony on behalf of ASUS
02:59 17 about specific issues that are relevant to the case,
02:59 18 you didn't bother preparing, but now you've studied up
02:59 19 since you're going to come to the United States?

02:59 20 A. I am not sure which -- what you're referring
03:00 21 to by the notice you mentioned.

03:00 22 Q. Okay. You understand we took your testimony
03:00 23 under oath well into the case, right?

03:00 24 A. Yes. I did that last year.

03:01 25 Q. And last August you didn't know -- did not

03:01 1 know what display technologies were incorporated into
03:01 2 the panels, correct?

03:01 3 A. As I just mentioned, I did take a look at
03:01 4 them, but I didn't have an in-depth understanding of
03:01 5 the technologies.

03:01 6 Q. And last August you didn't know the types of
03:01 7 backlights that were in the monitors, right?

03:01 8 A. I didn't know what the backlighting had to do
03:02 9 with these patents.

03:02 10 Q. Last August you didn't know if quantum dot
03:02 11 technology led to enhanced color accuracy, right?

03:02 12 A. Well, I am a product -- I work in product
03:02 13 planning. I'm not a technical person.

03:02 14 Q. You're not a technical person. I agree. I'm
03:02 15 just asking you a very simple question referring to
03:03 16 last August.

03:03 17 You did not know if quantum dot technology led
03:03 18 to enhanced color accuracy, correct?

03:03 19 A. Right. I did not know that.

03:03 20 Q. You did not know the details regarding
03:03 21 suppliers' utilization of quantum dots, correct?

03:03 22 A. What models are you referring to?

03:03 23 Q. Models that use quantum dots, sir. You did
03:04 24 not know the details regarding suppliers' utilization
03:04 25 of quantum dots, correct?

03:04 1 A. I did not know the details of that.

03:04 2 Q. You did not know what features ASUSTeK
03:04 3 advertises as important for its quantum dot monitors,
03:04 4 correct?

03:04 5 A. That's not what I said.

03:04 6 Q. I tell you what. You have a witness binder in
03:04 7 front of you. If you would, will you turn to the tab
03:05 8 with your first deposition and turn to Page 51?

03:05 9 MR. CALDWELL: And when he finds Page 51,
03:05 10 I would like to direct him to Line 19.

03:05 11 THE INTERPRETER: Counsel, could you tell
03:05 12 us what tab that is?

03:05 13 MR. CALDWELL: It's Tab 1. Tab 1,
03:05 14 Page 51, Line 19.

03:05 15 THE INTERPRETER: Thank you.

03:06 16 A. Okay. I see Page 51.

03:06 17 BY MR. CALDWELL:

03:06 18 Q. Do you see Line 19?

03:06 19 A. I see it.

03:06 20 Q. Are you able to read Line 19 through 22, which
03:06 21 have been transcribed in English? Or if not, I will --
03:06 22 suppose I'll just have to ask them to you and have them
03:06 23 translated.

03:06 24 A. I need a translation.

03:07 25 MR. CALDWELL: Okay. Your Honor, given

03:07 1 that this is through a translation, may I repeat the
03:07 2 question and answer that was in his deposition and ask
03:07 3 if I've --

03:07 4 THE COURT: Of course.

03:07 5 MR. CALDWELL: -- if it's correct?

03:07 6 BY MR. CALDWELL:

03:07 7 Q. So I'm going to read Page 51, Line 19.

03:07 8 Mr. Lee, what features does ASUSTeK advertise
03:07 9 as important for its quantum dot monitors?

03:07 10 Your answer is: I cannot know.

03:07 11 Do you believe I read that correctly?

03:07 12 A. That's correct.

03:08 13 Q. Similarly, you did not know one way or another
03:08 14 if ASUSTeK thinks that quantum dot monitors were
03:08 15 commercially successful, correct?

03:08 16 A. My impression is that I need to ask the
03:08 17 attorney for a definition of "success."

03:08 18 Q. Sir, you testified you don't know if quantum
03:09 19 dot monitors were successful, right?

03:09 20 A. So are you asking about my answers at that
03:09 21 time or asking for answers now, here?

03:09 22 Q. I'm asking how you testified under oath
03:09 23 halfway through this case, sir.

03:09 24 A. I'm sorry. I don't recall.

03:09 25 Q. It's true that ASUSTeK does not know what

03:10 1 technologies were incorporated into display panels,
03:10 2 correct?

03:10 3 A. That's correct because we are not a
03:10 4 manufacturer of display panels.

03:10 5 Q. Agreed.

03:10 6 And so whether or not to use quantum dot
03:10 7 technology is a decision made by the display panel
03:10 8 vendors, correct?

03:10 9 A. Correct.

03:10 10 Q. Also, you do not know about matters regarding
03:11 11 product research and development, correct?

03:11 12 A. Yes. Correct.

03:11 13 Q. But you do understand that research and
03:11 14 development costs, that's an important part of SVV's
03:11 15 damages model, right?

03:11 16 A. I saw the explanations of that this morning.

03:11 17 Q. But ultimately -- and like I say, I mean no
03:11 18 disrespect. The person that ASUSTeK chose to bring
03:11 19 here is not a technical person, right?

03:11 20 A. I think this was a decision made by our
03:12 21 company because like I said, they were looking for
03:12 22 technical people located here.

03:12 23 Q. There is no technical ASUS employee who is
03:12 24 going to testify in front of this jury, correct?

03:12 25 A. Well, this technology is about the backlights,

03:13 1 but ASUS is not a manufacturer of LCD panels. And,
03:13 2 therefore, ASUS is not responsible for the vendors of
03:13 3 those display panels.

03:13 4 Q. Did you mean to say "correct" in response to
03:13 5 my last question, that ASUS is not going to bring any
03:13 6 technical employee to talk to this jury?

03:14 7 THE INTERPRETER: The interpreter would
03:14 8 like to ask for clarification.

03:14 9 A. ASUS did not look for technical people this
03:14 10 time.

03:14 11 BY MR. CALDWELL:

03:14 12 Q. Thank you.

03:14 13 So, sir, perhaps you are on the financial, the
03:14 14 money side at ASUSTeK; is that correct?

03:14 15 A. I know a little bit about it.

03:15 16 Q. And one of the things you know is that costs
03:15 17 can change over time, correct?

03:15 18 CHECK INTERPRETER: The check interpreter
03:15 19 would like to clarify --

20 (Clarification by Reporter.)

03:15 21 CHECK INTERPRETER: The check interpreter
03:15 22 would like to interpret -- would like to translate.

03:15 23 A. Yes. I understand.

03:15 24 BY MR. CALDWELL:

03:15 25 Q. I don't want the question lost. I know that

03:15 1 everybody's doing the absolute best they can. I just
03:15 2 don't want the question lost.

03:15 3 To clarify, what I'm asking is, you understand
03:16 4 that costs can change over time, correct?

03:16 5 A. Yes.

03:16 6 Q. And, for example, the pandemic, the COVID
03:16 7 pandemic affected your supply chain some and caused
03:16 8 fluctuations in costs, correct?

03:16 9 A. Yes.

03:16 10 Q. And while you know some stuff about costs, you
03:16 11 do not know the costs of backlights for monitors,
03:16 12 correct?

03:16 13 A. I only know a percentage.

03:17 14 Q. Sir, your testimony, as I understand it, is
03:17 15 because you're not a vendor for display panels, you do
03:17 16 not know about the price of backlighting; is that
03:17 17 correct?

03:17 18 A. We do not know the exact costs or the details
03:17 19 of the costs, but in preparation for this case, we did
03:18 20 learn a little bit about it.

03:18 21 Q. All right. Sir, I would like to direct you to
03:18 22 your deposition. It's at Tab 1. And if you would,
03:18 23 please flip to Page 39.

03:18 24 A. I see it.

03:18 25 Q. Okay. And now I'd like to direct you starting

03:18 1 at Line 19 on that page.

03:18 2 I will read the question and answer, and
03:18 3 hopefully you can tell me if I read it correctly.

03:18 4 Does one type of backlighting, for example,
03:18 5 lead to a higher priced monitor?

03:18 6 Your answer: Because we are not a vendor for
03:19 7 display panels, we do not know about the -- its price.
03:19 8 We do not know about the price of backlighting.

03:19 9 Did I read that correctly?

03:19 10 A. Correct. We do not know the details of the
03:20 11 costs.

03:20 12 Q. Now, you were here just a few minutes ago when
03:20 13 your lawyer was cross-examining Dr. Farber, correct?

03:20 14 A. I recall that. Yes.

03:20 15 Q. And she was criticizing Dr. Farber for not
03:20 16 talking about the price of backlights, correct?

03:20 17 A. I remember it.

03:20 18 Q. And as I understand, when we took your
03:20 19 deposition under oath, you didn't know about the price
03:21 20 of backlighting, but what you want to do today is say,
03:21 21 well, now that we're after my deposition, I studied up
03:21 22 on it so I can give you some other details in trial?
03:21 23 Is that kind of what's going on?

03:21 24 A. I still do not know much about the details of
03:22 25 the costs. I just know approximate percentages or

03:22 1 proportions.

03:22 2 Q. Do you know whether quantum dot monitors are
03:22 3 more or less profitable?

03:22 4 A. The profit on each unit is different.

03:22 5 Q. Is it fair to say, though, that you're not the
03:22 6 most knowledgeable person at ASUS when it comes to the
03:22 7 cost of parts and profit for the monitors that are at
03:22 8 issue in this case?

03:22 9 A. Well, that's because I could not possibly
03:23 10 remember or know the cost and profit information for
03:23 11 hundreds of different model types.

03:23 12 Q. Well, a year ago, you just told us you don't
03:23 13 know whether quantum dot monitors are more or less
03:23 14 profitable, right?

03:23 15 A. Well, there are just too many different
03:23 16 models. I could not -- I could not remember them all.

03:24 17 Q. You know what you said in your deposition
03:24 18 about the pricing of quantum dot monitors and the
03:24 19 profit, correct?

03:24 20 A. I don't remember.

03:24 21 Q. Okay. Sir, I'll move on.

03:24 22 Do you understand that there are fundamentally
03:24 23 two issues that will be presented for the jury to
03:24 24 decide at least at a high level?

03:24 25 A. Could you please explain which two issues?

03:25 1 Q. At a high level, the jury's going to answer a
03:25 2 question about infringement and a question about
03:25 3 damages, right?

03:25 4 A. We found technical experts and technical
03:25 5 witnesses and damages witnesses for this.

03:25 6 Q. I'm trying to be respectful of everybody's
03:26 7 time here, sir.

03:26 8 Mr. Lee, I want to make sure you understand
03:26 9 that the jury will be asked to determine whether there
03:26 10 is infringement and whether -- or what the extent of
03:26 11 damages is.

03:26 12 Do you understand that?

03:26 13 A. Yes. I understand that.

03:26 14 Q. Okay. And, sir, the person that ASUS chose to
03:26 15 send doesn't know or understand the patents or have the
03:27 16 technical testimony and also doesn't understand the
03:27 17 backlight costs, correct?

03:27 18 A. Well, we did look for technical witnesses, and
03:27 19 I think their depositions would be more informative.

03:27 20 Q. Well, you looked for technical witnesses to
03:28 21 testify at the trial, technical witnesses you would
03:28 22 hire to testify, correct?

03:28 23 A. I believe so.

03:28 24 Q. Who are they?

03:28 25 A. I think they are people who were hired by our

03:28 1 attorneys.

03:28 2 Q. Do you know any of their names?

03:28 3 A. The witness, the technical witness, is named
03:29 4 Keith. I'm sorry, I don't remember his last name. And
03:29 5 the damages witness is like me, also named James. And
03:29 6 again, I'm sorry. I don't recall his last name. It's
03:29 7 a little long.

03:29 8 Q. Last Thursday your lawyers told us they would
03:29 9 be calling a witness, Mr. Zane Coleman.

03:29 10 Have you ever met Zane Coleman?

03:29 11 A. I don't remember.

03:29 12 Q. Thank you.

03:29 13 Mr. Lee, what was your job in the 2021/2022
03:30 14 time?

03:30 15 A. I was also serving as the project manager or
03:30 16 division -- division director.

03:30 17 Q. Still in the same monitor space. In other
03:30 18 words, a similar role to what you have now, correct?

03:30 19 A. Yes.

03:30 20 Q. And like now, you worked with panel vendors
03:30 21 and ODMs, correct?

03:30 22 A. Correct.

03:31 23 Q. Okay. Can you name panel manufacturers that
03:31 24 you work with and know how to contact?

03:31 25 A. Okay. There are at least five or six of them.

03:32 1 AUO, Innolux, BOE, SDC, which is Samsung, LGD, CSOT.

03:32 2 Q. How many of those were you working with back
03:32 3 in 2021?

03:32 4 A. Almost all of them.

03:32 5 Q. Which ones were you not working with, if you
03:32 6 can identify any?

03:32 7 A. All of the ones I just mentioned, we worked
03:33 8 with them.

03:33 9 Q. I think you said as far as preparing to come
03:33 10 to trial, you talked with Jason Wu. Am I correct about
03:33 11 that?

03:33 12 A. Yes.

03:33 13 Q. How long have you known Jason Wu?

03:33 14 A. I have been in pretty consistent contact with
03:33 15 him since 2022 because of the -- because of -- because
03:33 16 this case -- because of this case that arose.

03:34 17 Q. And did you at least meet him in 2021?

03:34 18 A. I don't recall.

03:34 19 Q. You've been here for this trial pretty much
03:34 20 the whole time, or if not the whole time, correct?

03:34 21 A. I will be here all week.

03:34 22 Q. I just want to -- I'm just confirming you have
03:34 23 seen everything yesterday and today. That's all I'm
03:34 24 trying to confirm.

03:34 25 A. Do you mean that I've seen everything

03:35 1 happening in the court?

03:35 2 Q. Yes.

03:35 3 A. Yes.

03:35 4 Q. So, Mr. Lee, you will have seen several times
03:35 5 now e-mail correspondence that is from Jason Wu to
03:35 6 SVV's lawyer, Robert Katz.

03:35 7 Are you familiar with that?

03:35 8 A. I recall them. Yes.

03:36 9 Q. If in 2001 you were -- I'm sorry. I'll start
03:36 10 over.

03:36 11 If in 2021 you were in regular contact with
03:36 12 six panel makers, why did Jason Wu tell Mr. Katz he's
03:36 13 not sure how to get into contact with panel makers?

03:36 14 A. If I recall correctly, he did send the contact
03:37 15 for AUO and was working on getting information for
03:37 16 Innolux.

03:37 17 Q. He sent one e-mail address for AUO and said he
03:37 18 doesn't know the person's name, correct?

03:37 19 THE COURT: Counsel, about how much time
03:37 20 do you have left with him?

03:37 21 MR. CALDWELL: 25 minutes.

22 THE COURT: 25 minutes?

03:37 23 MR. CALDWELL: I'm guessing just -- it's
03:37 24 a little slower.

03:37 25 THE COURT: Ladies and gentleman, we're

03:37 1 going to take our afternoon recess. Please remember my
03:37 2 instructions not to discuss the case.

03:37 3 THE BAILIFF: All rise.

03:37 4 (Jury exited the courtroom.)

03:38 5 THE COURT: Thank you. You may be
6 seated.

03:38 7 You may step down.

03:38 8 To be clear, this gentleman is your
03:38 9 corporate representative, correct?

03:38 10 MS. MARRIOTT: Yes, Your Honor.

03:38 11 THE COURT: Okay. Therefore, there's no
03:38 12 prohibition against you speaking with him during the
03:38 13 break.

03:38 14 MS. MARRIOTT: Thank you, Your Honor.

03:38 15 THE COURT: Anything we need to take up?

03:38 16 MR. CALDWELL: No.

03:38 17 THE COURT: Okay.

03:38 18 (Recess taken.)

03:55 19 THE BAILIFF: All rise.

03:55 20 THE COURT: Please remain standing for
03:55 21 the jury.

03:55 22 (Jury entered the courtroom.)

03:56 23 THE COURT: Thank you. You may be
24 seated.

25 MR. CALDWELL: Thank you, Your Honor.

1 May I proceed?

2 THE COURT: Please.

03:56 3 MR. CALDWELL: Thank you.

03:56 4 BY MR. CALDWELL:

03:56 5 Q. So before we took the break, I was asking you
03:56 6 about the correspondence between SVV's lawyer and Jason
03:56 7 Wu at ASUSTeK, correct?

03:56 8 A. I recall that.

03:56 9 Q. Okay.

03:56 10 MR. CALDWELL: Now, Mr. Diaz, can I have
03:56 11 Plaintiff's Trial Exhibit 44, and if you'll just go to
03:56 12 the page -- I think it's the next one and -- yes.
03:56 13 Perfect.

14 BY MR. CALDWELL:

03:57 15 Q. So, Mr. Lee, Plaintiff's Trial Exhibit 44 is
03:57 16 on the screen, and this is the e-mail you started to
03:57 17 reference where Jason Wu had identified a contact
03:57 18 person for AUO of Linh Ha at AUO.

03:57 19 Do you see that?

03:57 20 A. I see that. Yes.

03:57 21 Q. Do you know Linh Ha?

03:57 22 A. I don't know him or her.

03:58 23 Q. Have you ever heard that name before you saw
03:58 24 this e-mail chain?

03:58 25 A. No.

03:58 1 Q. And were you here during the testimony from
03:58 2 Dr. Vasylyev when he said they tried to reach out, but
03:58 3 AUO just wanted to start the whole claim chart thing
03:58 4 all over again from square one?

03:58 5 A. Yes.

03:59 6 MR. CALDWELL: Just keep that up, but we
03:59 7 don't need that highlighting. I'm going to direct you
03:59 8 to somewhere else.

03:59 9 I really want to go -- no, same part of
03:59 10 that. I'm sorry, Pete.

03:59 11 I want to go to that third sentence that
03:59 12 begins with "Accordingly."

03:59 13 BY MR. CALDWELL:

03:59 14 Q. So before we took the break, you were
03:59 15 answering that Jason Wu had tried to give his contact
03:59 16 information for a panel maker, right?

03:59 17 A. Jason Wu provided the contact person for AUO.

04:00 18 Q. Right. Someone you, who actually works with
04:00 19 AUO, has never heard of, correct?

04:00 20 A. I had not heard of that person because our
04:00 21 normal contacts at AUO were in business and PMs.

04:01 22 Q. That's kind of my point. Earlier in the
04:01 23 e-mail what Jason Wu tells us is that we, meaning
04:01 24 ASUSTeK, do not have information regarding the panel
04:01 25 manufacturers of the monitors and the points of contact

04:01 1 for the panel manufacturers.

04:01 2 Do you see that in his e-mail?

04:01 3 A. It is written that way in the e-mail. Yes.

04:02 4 Q. And while Jason Wu was telling us that, you,
04:02 5 sir, absolutely had points of contact for the panel
04:02 6 manufacturers and talked to them regularly, correct?

04:02 7 A. Yes. I had the contact information for the
04:02 8 people working in business and the PMs at that company.

04:03 9 Q. So did you not tell Jason Wu the contact
04:03 10 information for the panel makers, or did he not even
04:03 11 ask you, the product manager, for the monitors?

04:03 12 A. As I recall, he did ask me.

04:03 13 Q. Mr. Wu asked you before or after he told us
04:04 14 that ASUSTeK does not have contact information for the
04:04 15 panel manufacturers?

04:04 16 A. Well, as I said earlier, I started to be in
04:04 17 closer contact with him beginning in 2022 relating to
04:04 18 this case, but I don't know exactly which month in 2022
04:04 19 that was.

04:04 20 Q. We can at least agree that when Mr. Wu was
04:04 21 telling Mr. Katz that ASUSTeK does not have information
04:05 22 on panel manufacturers and have points of contact for
04:05 23 the panel manufacturers, that is untrue because at the
04:05 24 very least, you, the product manager for the monitors,
04:05 25 had that exact information, correct?

04:05 1 A. I do recall that he asked for help in 2022 in
04:06 2 getting the contacts from business and PMs, and we
04:06 3 asked the legal affairs about this.

04:06 4 Q. Okay.

04:06 5 THE INTERPRETER: I would like to
04:06 6 clarify.

04:06 7 CHECK INTERPRETER: The check interpreter
04:06 8 suggestion, in 2022, they did ask for my help through
04:06 9 PM to find the legal liaison.

04:06 10 THE INTERPRETER: Thank you.

04:06 11 BY MR. CALDWELL:

04:06 12 Q. Okay. Sir, we'll move on.

04:06 13 You testified when we took your deposition
04:07 14 that you didn't know the patents because you're not an
04:07 15 engineer.

04:07 16 Do you remember that?

04:07 17 A. I remember that.

04:07 18 Q. Okay. And now, a technical person was -- we
04:07 19 did speak to a technical person also under oath and
04:07 20 that was Chia-Lei Yu.

04:07 21 Did you know that we took that deposition?

04:07 22 A. I know.

04:07 23 Q. Okay. And you understand that Chia-Lei --
04:07 24 which for the record, I think, at least the way it's
04:07 25 translated in English, is C-h-i-a L-e-i.

04:08 1 Just to make sure this is clear, Chia-Lei Yu
04:08 2 is ASUS' chief of the R&D department for monitors,
04:08 3 right?

04:08 4 A. Correct.

04:08 5 Q. Okay. And you understand that even more than
04:08 6 a year into this case, Mr. Yu is not familiar with the
04:08 7 content of SVV's patents either?

04:09 8 A. If that's what he said in his deposition, that
04:09 9 is true.

04:09 10 Q. So if Dr. Vasylyev and SVV would prefer to
04:09 11 avoid litigation, what do they have to do to get
04:09 12 somebody at ASUSTeK who's technical on monitors to read
04:09 13 their patents?

04:09 14 A. I'm sorry. I don't know.

04:10 15 Q. You heard with the last witness, Dr. Farber,
04:10 16 both in his direct and cross-examination, he talked
04:10 17 about this concept of noninfringing alternatives.

04:10 18 Do you recall that coming up in the testimony?

04:10 19 A. He did get into the technical details. I do
04:11 20 know that he mentioned this.

04:11 21 Q. Well --

04:11 22 CHECK INTERPRETER: May the check
04:11 23 interpreter make a suggestion? He talked about a lot
04:11 24 of technical stuff.

04:11 25 BY MR. CALDWELL:

04:11 1 Q. On cross-examination your lawyer suggested or
04:11 2 implied that ASUS could just switch to some alternative
04:11 3 that was noninfringing.

04:11 4 Do you remember that suggestion in the
04:11 5 cross-examination?

04:11 6 A. Yes. I remember that.

04:12 7 Q. Okay. But one thing she did not do is she
04:12 8 didn't actually show any technical example of a
04:12 9 noninfringing alternative, correct?

04:12 10 A. She did not.

04:12 11 Q. In this case, did SVV ask ASUSTeK if it was
04:13 12 aware of or looking into any alternatives it could
04:13 13 switch to that would avoid infringement?

04:13 14 A. We did not make any changes to our designs.

04:13 15 Q. Right.

04:14 16 THE INTERPRETER: Interpreter would like
04:14 17 to clarify one thing.

04:14 18 A. We did not make any design changes once this
04:14 19 case began.

04:14 20 BY MR. CALDWELL:

04:14 21 Q. Right. My question is, though, do you
04:14 22 understand that we, SVV, asked ASUSTeK if it was
04:14 23 looking into any design changes that would be
04:14 24 noninfringing? It's just yes or no.

04:14 25 Do you understand we asked you that question?

04:14 1 A. I don't recall.

04:15 2 Q. Okay. I'd like to have you take your binder
04:15 3 and we'll flip to the very final tab. That's Tab No. 7
04:15 4 in that binder.

04:15 5 And in Tab 7, if you would, would you please
04:15 6 flip to Page 9?

04:15 7 A. Okay.

04:15 8 Q. In order to keep the translation efficient,
04:15 9 I'm just going to get right to the heart of the issue,
04:16 10 okay?

04:16 11 On Page 9 -- sir, right here on Page 9,
04:16 12 ASUSTeK told us: Responding party, ASUSTeK, is not
04:16 13 presently aware of and is not investigating any
04:16 14 noninfringing alternatives or design-arounds.

04:16 15 Did I read that correctly?

04:16 16 A. I see it.

04:17 17 Q. And they were telling us the truth, weren't
04:17 18 they?

04:17 19 A. That's what the document says.

04:17 20 Q. And right below the sentence I read, ASUSTeK
04:17 21 said: Investigation and discovery are continuing.

04:17 22 Do you see that?

04:17 23 A. I see that.

04:17 24 Q. And do you understand that ASUSTeK had the
04:17 25 ability and, in fact, the duty to supplement that

04:17 1 answer if they had changed their answer?

04:17 2 Do you understand that?

04:17 3 A. I don't know about that.

04:18 4 Q. I'd like to have you flip to Page 14 of that
04:18 5 same document.

04:18 6 A. Okay.

04:18 7 Q. Have you found Page 14, sir?

04:18 8 A. Yes.

04:18 9 Q. And sometimes when these interrogatory answers
04:18 10 are served, there's a document added to the end called
04:18 11 the verification, and that's what this is.

04:18 12 Do you see the document that says it's a
04:19 13 verification of the answers?

04:19 14 THE INTERPRETER: The interpreter would
04:19 15 like to ask the check interpreter for a term
04:19 16 "interrogatory."

04:20 17 A. I see the document, Page 14.

04:20 18 BY MR. CALDWELL:

04:20 19 Q. And who is it that verified these answers on
04:20 20 behalf of ASUSTeK?

04:20 21 A. I see Jason Wu's signature on Page 14.

04:20 22 Q. Yes. Jason Wu, the person that's in charge of
04:20 23 our case that had been corresponding with Mr. Katz all
04:20 24 those years ago, the same person, correct?

04:21 25 A. Yes.

04:21 1 Q. And as far as you know, the answers that he
04:21 2 verified are still true, that ASUS is not making an
04:21 3 effort to identify a noninfringing alternative,
04:21 4 correct?

04:21 5 A. I'm not able to answer on behalf of Jason Wu.

04:21 6 Q. Well, I'm asking you to answer on behalf of
04:22 7 ASUSTeK because you are the corporate representative in
04:22 8 this trial. And I want to know, ASUSTeK has not
04:22 9 changed its answer, and you stand by that answer today,
04:22 10 correct?

04:22 11 A. That is what it says in the document.

04:22 12 Q. Yes, sir. And you're not coming to court
04:22 13 today to try to change ASUSTeK's answer, are you?

04:22 14 A. I do not want to make any changes.

04:23 15 Q. So in response to the original notice letter
04:23 16 from Mr. Katz, ASUSTeK changed nothing about its
04:23 17 monitor panels, right?

04:23 18 A. We did not make any design changes.

04:23 19 Q. And in response to Mr. Katz sending the 40
04:23 20 claim charts after Jason Wu asked for claim charts,
04:24 21 ASUS didn't change anything about its monitors, right?

04:24 22 A. We did not make any changes.

04:24 23 Q. And then once the case was on file, we went
04:24 24 and talked to the technical corporate representative
04:24 25 for ASUSTeK, which was that Mr. Chia-Lei Yu.

04:24 1 You're aware that we took his deposition,
04:24 2 right?

04:24 3 A. Yes. I know.

04:25 4 Q. And Mr. Yu was not familiar with the content
04:25 5 of the patents and testified that he's not able to
04:25 6 answer questions regarding noninfringing alternatives,
04:25 7 correct?

04:25 8 A. If that's how he answered, then that is how he
04:25 9 answered.

04:25 10 Q. Would you like to see it?

04:25 11 A. We could do that.

04:25 12 Q. All right. If you would flip to Tab 4.

04:26 13 A. I have turned to Page 4.

04:26 14 Q. Okay. And it's Page 7.

04:26 15 Have you found Page 7?

04:26 16 A. I found it.

04:26 17 Q. Okay. And I'm going to start at Line 6.

04:26 18 There was some translation stuff before that, but I'm
04:26 19 going to start at Line 6.

04:26 20 And it says: In fact, actually, so far I am
04:26 21 not familiar with the content of the asserted patents
04:26 22 in this case. So I don't think I am able to answer
04:26 23 your question regarding describing the alternative
04:26 24 noninfringing alternatives.

04:27 25 Did I read that correctly?

04:27 1 A. May I see that?

04:27 2 Q. So there's original discussions in the claim
04:27 3 charts; that was with Jason Wu and it did not result in
04:27 4 change. And then we talked just now about the
04:27 5 testimony of Mr. Yu. Correct?

04:28 6 A. Correct.

04:28 7 Q. And you, Mr. Lee, have indicated that because
04:28 8 you're not an engineer, you cannot describe or identify
04:28 9 any potential noninfringing alternatives, right?

04:28 10 A. Correct.

04:29 11 Q. And said differently from our past
04:29 12 discussions, you would not know how to design around
04:29 13 any patented technology, correct?

04:29 14 A. Correct.

04:29 15 Q. Okay. And so as you sit here, you don't have
04:29 16 a design in mind to switch to to avoid infringing,
04:29 17 right?

04:29 18 A. Right.

04:30 19 Q. And you are the monitor project -- I'm sorry.
04:30 20 Strike that.

04:30 21 You are the monitor's product planner,
04:30 22 correct?

04:30 23 A. Correct.

04:30 24 Q. So ASUS' monitor product planner that they
04:30 25 brought to this trial has no plans to stop infringing,

04:30 1 correct?

04:30 2 A. No. We -- we take this very seriously, the
04:31 3 matter of intellectual property, and we -- this is why
04:31 4 I wanted to come here, to defend ourselves against this
04:31 5 claim.

04:31 6 CHECK INTERPRETER: The check interpreter
04:31 7 would want to add one thing he said, that we never
04:31 8 thought about infringing or infringement.

04:31 9 THE INTERPRETER: Thank you.

04:31 10 BY MR. CALDWELL:

04:31 11 Q. Mr. Lee, after your lawyer got up and
04:31 12 suggested with the last witness that you guys could
04:31 13 switch to some design that didn't infringe, you as the
04:31 14 product planner have no design to switch to in mind as
04:32 15 you sit here today and testify, right?

04:32 16 A. Well, we need to first clarify whether there
04:32 17 was any infringement.

04:32 18 Q. When your lawyer talked about changing the
04:32 19 design, you don't have any different design in mind
04:33 20 that you would switch to, correct?

04:33 21 A. There are a lot of factors to take into
04:33 22 consideration when making any potential changes, and
04:33 23 the attorney is not a technical expert.

04:33 24 THE INTERPRETER: So the interpreter
04:33 25 would like to clarify something here.

04:33 1 A. The attorney is not a engineer, and so they
04:34 2 would not know what impact that would have, what impact
04:34 3 such changes would have on the products.

04:34 4 BY MR. CALDWELL:

04:34 5 Q. Agreed.

04:34 6 And also not an engineer is yourself,
04:34 7 respectfully. So you've hired somebody else. Rather
04:34 8 than bring ASUS engineers, you've hired somebody else
04:34 9 to talk about noninfringement, correct?

04:35 10 THE INTERPRETER: May the interpreter ask
04:35 11 him to repeat this one sentence?

04:35 12 A. Well, the important -- the importance of this
04:35 13 case is in the backlighting, and ASUS is not a panel
04:36 14 manufacturer. Therefore, we have asked or hired an
04:36 15 optical expert to testify here in this case.

04:36 16 MR. CALDWELL: I'll pass the witness.

04:36 17 Thank you for your time.

04:36 18 THE COURT: Do you have any questions?

04:36 19 MS. MARRIOTT: Your Honor, we're going to
04:36 20 reserve our questions for our case.

04:36 21 THE COURT: Could I have counsel up here,
04:36 22 please?

04:39 23 (Bench conference.)

04:39 24 THE COURT: Let's go back on the record.

04:39 25 What was the exhibit?

04:39 1 MR. CALDWELL: PTX-44. His colleague
04:39 2 reminded me we need to admit that version of --

04:39 3 MR. BURESH: Yes. No objection. I think
04:39 4 we've both used it.

04:39 5 THE COURT: So okay.

04:39 6 (Bench conference concludes.)

04:39 7 THE COURT: Who's the plaintiff's next
04:39 8 witness?

04:39 9 MR. CALDWELL: Your Honor, with the
04:39 10 reservation that we may need to put some stickers on
04:40 11 some boards, demonstratives, that sort of thing, the
04:40 12 plaintiff rests.

04:40 13 THE COURT: Ladies and gentleman of the
04:40 14 jury, we're done for the day. Remember I have
04:40 15 sentencings in the morning. If you all want to get
04:40 16 here earlier than 10:00, it's a public courtroom.
04:40 17 You're welcome to come in and watch what's going on.

04:40 18 What I'm going to be doing starting at
04:40 19 9:00 is public. So you're welcome to come, but you're
04:40 20 also welcome to not come until 10:00. And you're
04:40 21 welcome when you get here to go directly to the jury
04:40 22 room. And so whatever is easiest for you all.
04:40 23 Hopefully that will give you a little extra time to
04:40 24 sleep in the morning.

04:40 25 And so we will see you tomorrow -- I

04:40 1 can't promise we'll be done -- we'll be ready to go at
04:40 2 10:00. But if y'all are here and ready to go when I
04:40 3 finish the sentencing, it will start very quickly after
04:40 4 I'm done with the sentencing.

04:40 5 And so -- and for your purposes, unless
04:40 6 something extraordinary happens, the lawyers and I
04:40 7 anticipate that the closing arguments will take place
04:40 8 sometime Thursday morning, which means you'll begin
04:41 9 deliberating on Thursday. And so we are totally on
04:41 10 schedule, and I appreciate your hard work. I
04:41 11 appreciate very much the hard work of the lawyers who
04:41 12 have made this possible.

04:41 13 We'll see you tomorrow.

04:41 14 THE BAILIFF: All rise.

04:41 15 (Jury exited the courtroom.)

04:41 16 THE COURT: You may be seated.

04:41 17 So let me go ahead and put this on the
04:41 18 record. My plan is tomorrow to meet at lunch and do
04:41 19 the jury charge. As I think you've all been in front
04:41 20 of me maybe more than once, but as you know, if you
04:41 21 want to be there, you're welcome. If you don't want to
04:41 22 be there, I don't care.

04:42 23 You know, I'm not a judge who feels like
04:42 24 you all have to be -- whoever wants to come is welcome.
04:42 25 Whoever has other things like putting on witnesses or

04:42 1 doing closing arguments is welcome to be working on
04:42 2 that, and I take no offense to it.

04:42 3 With regard to the jury charge itself, as
04:42 4 you know, most of this -- the default that will win, it
04:42 5 will always be that I've given it before with the
04:42 6 exception if it was in the -- one of the first two or
04:42 7 three cases I had, that's not as good an argument. But
04:42 8 if it's in the last five, it's unlikely you will change
04:42 9 my mind. And so that's what we'll do there.

04:42 10 Now, does the defendant have a Rule 50
04:42 11 motion they'd like to make?

04:42 12 MR. BURESH: We do, Your Honor, and it
04:42 13 will be presented by Chris Schmidt.

04:42 14 THE COURT: Okay.

04:42 15 Yes, sir.

04:42 16 MR. SCHMIDT: Good afternoon, Your Honor.
04:42 17 Chris Schmidt on behalf of the defendant. We have six
04:43 18 Rule 50 motions.

04:43 19 The first motion is for a finding of
04:43 20 noninfringement as a matter of law, that SVV has not
04:43 21 shown that any accused product has lenses that are,
04:43 22 quote, configured for injecting light into the space
04:43 23 between the optically transmissive and reflective
04:43 24 surfaces as required by Claim 19 of the '089 patent.

04:43 25 SVV entirely failed to discuss this claim

04:43 1 requirement. A word search of Mr. Credelle's testimony
04:43 2 confirms that neither he nor his counsel ever used the
04:43 3 word "inject" at all during his testimony and entirely
04:43 4 failed to address this requirement.

04:43 5 The relevant testimony on this limitation
04:43 6 spanned from Pages 308, Line 17, to Page 309, Line 6
04:43 7 from the Day 1 testimony.

04:43 8 And review of that testimony confirms
04:43 9 that Mr. Credelle failed to provide any testimony to
04:44 10 explain how the accused lenses inject light into the
04:44 11 space between the transmissive and reflective surfaces
04:44 12 as required by Claim 19 of the '089 patent.

04:44 13 Further, from the basic structure of the
04:44 14 product, it is evident that light is already in the
04:44 15 space before the light ever touches a lens such that it
04:44 16 is not the lens that injects light into the space at
04:44 17 all.

04:44 18 For these reasons, SVV has not shown that
04:44 19 the, quote, configured for injecting light limitation
04:44 20 of Claim 19 of the '089 patent has been met.

04:44 21 THE COURT: Why don't you just go ahead
04:44 22 and do all of them? If I hear something I need a
04:44 23 response on, I'll hear it.

04:44 24 MR. SCHMIDT: The second motion is for a
04:44 25 finding of noninfringement as a matter of law that SVV

04:44 1 has not shown that any accused product has a broad-area
04:44 2 light input surface and an opposing broad-area light
04:44 3 output surface extending generally parallel to said
04:45 4 light input surface as required by Claim 3 of the '318
04:45 5 patent.

04:45 6 Mr. Credelle admitted that light comes
04:45 7 into the accused light guides from the edge and exits
04:45 8 the light guide from the top and bottom. Mr. Credelle
04:45 9 nonetheless opined that the bottom of the light guide
04:45 10 is the light input surface which is contrary to the
04:45 11 plain meaning of the term "light input surface" as
04:45 12 described in Claim 3 of the '318 patent.

04:45 13 SVV has, therefore, not shown that the
04:45 14 broad-area light input surface limitation has been met.

04:45 15 The third motion is for a finding of
04:45 16 noninfringement as a matter of law as to Claims 1 and
04:45 17 21 of the '342 patent because SVV has not shown that
04:45 18 any accused product has a predetermined alignment
04:45 19 between light-deflecting elements on the bottom surface
04:45 20 of the light guide and the lenses at the top surface of
04:46 21 the light guide as required by this limitation.

04:46 22 SVV agrees that the pattern of surface
04:46 23 relief features is random while the lenses are in a
04:46 24 linear array but nonetheless asserts, without evidence,
04:46 25 that the random relief features are in a predetermined

04:46 1 alignment with the linear lenses.

04:46 2 Mr. Credelle admitted that "predetermined
04:46 3 alignment" means the alignment is, quote, by design.
04:46 4 He also admitted that the two surface relief features
04:46 5 relied upon happened to be aligned with a corresponding
04:46 6 lens which contradicts his own plain and ordinary
04:46 7 understanding of predetermined.

04:46 8 Mr. Credelle further suggested that a
04:46 9 machine exists that indexes the two elements together
04:46 10 but provided no evidence that such a machine exists and
04:46 11 admitted he showed no CAD file or any other program,
04:46 12 document, or testimony even suggesting that such a
04:47 13 machine exists.

04:47 14 For these reasons, SVV has not shown that
04:47 15 any accused product has any light-deflecting elements
04:47 16 in a predetermined alignment with any lens as required
04:47 17 by Claims 1 and 21 of the '342 patent.

04:47 18 The fourth motion is for a finding of
04:47 19 noninfringement as a matter of law that SVV has not
04:47 20 shown any accused product has a predetermined
04:47 21 two-dimensional pattern of surface relief features as
04:47 22 required by Claims 1 and 7 of the '562 patent.

04:47 23 Mr. Credelle testified that his photos
04:47 24 show the existence of an irregular pattern and then
04:47 25 opined without evidence that this pattern is, quote,

04:47 1 predetermined. Mr. Credelle further testified this
04:47 2 pattern is random, and then opined this pattern is both
04:47 3 random and predetermined.

04:47 4 He presented no evidence of what happens
04:48 5 during manufacturing other than stating, without
04:48 6 evidence, that a CAD file or other program exists that
04:48 7 creates a predetermined pattern that is somehow still
04:48 8 random. SVV lacks evidence to support a finding of
04:48 9 infringement.

04:48 10 For these reasons, SVV has not shown the
04:48 11 existence of a predetermined two-dimensional pattern of
04:48 12 surface relief features in the accused products as
04:48 13 required by Claims 1 and 7 of the '562 patent.

04:48 14 And, Your Honor, we have two additional
04:48 15 motions. Mr. Siegmund will argue those.

04:48 16 MR. SIEGMUND: Mark Siegmund on behalf of
04:48 17 the defendant.

04:48 18 This one relates to willful infringement,
04:48 19 Your Honor.

04:48 20 ASUS moves as a matter of law there's not
04:48 21 sufficient evidence to support a claim of willful
04:48 22 infringement. Willful conduct, as the Court knows, is
04:48 23 malicious, wanton, deliberate and conscious, wrongful,
04:48 24 flagrant, or in bad faith, and the Court saw the letter
04:48 25 and the responses from ASUS throughout this trial, and

04:48 1 they show the exact opposite of flagrant or bad faith.

04:49 2 And there's several factors the Court's
04:49 3 aware of that courts use to evaluate this, hopefully
04:49 4 given in the jury instructions, whether or not ASUS
04:49 5 acted consistently with the standards of behavior for
6 its industry.

04:49 7 It's our view that asking for claim
04:49 8 charts responding to these e-mails and even providing
04:49 9 information on panel manufacturers is not outside the
04:49 10 ordinary industry practice.

04:49 11 The second factor is whether or not ASUS
04:49 12 intentionally copied a product of SVV. There's no
04:49 13 evidence of copying in this case.

04:49 14 The third element is whether or not ASUS
04:49 15 reasonably believed it did not infringe or that the
04:49 16 patent was invalid. We relied on our engineers and
04:49 17 input from the panel manufacturers that it did -- that
04:49 18 we did not infringe the patents.

04:49 19 And then, fourth, whether or not ASUS
04:49 20 made a good faith effort to avoid infringing the
04:49 21 asserted products; for example, whether ASUS has
04:49 22 attempted to design around the asserted patents. It is
04:49 23 a fact of this case that there are hundreds of
04:49 24 unaccused monitors that do the same thing.

04:49 25 So that is the willful infringement

04:50 1 motion, Your Honor.

04:50 2 THE COURT: Well, how does that not count
04:50 3 against you? I mean, in terms of willfulness?

04:50 4 MR. SIEGMUND: In terms of what,
04:50 5 Your Honor?

04:50 6 THE COURT: Well, they've told you what
04:50 7 they think is infringing, and you've shown that -- your
04:50 8 argument is we could have designed around, but you
04:50 9 haven't -- I mean, and I get -- look, I get you all
04:50 10 don't make the monitors. I get that.

04:50 11 But I'm saying you have continued -- if
04:50 12 it's possible to sell monitors that don't have the
04:50 13 infringing -- and I'm not -- that don't have what is
04:50 14 accused of infringing. I don't know if it infringes
04:50 15 either.

04:50 16 But you've made -- prior to filing the
04:50 17 lawsuit, they gave you all a notice -- I mean, a lot
04:50 18 more notice than I see ordinarily -- in their
04:50 19 communications, and your client made the decision -- I
04:50 20 understand why. They don't think they infringe.

04:50 21 But I don't see how I would take it away
04:50 22 from the jury at this point given the fact this is a
04:50 23 Rule 50 motion and there is evidence that would support
04:51 24 willfulness, and in my opinion they could easily argue
04:51 25 the reverse on the design-around that you just made.

04:51 1 So I'm not saying I'm right or wrong.
04:51 2 I'm just saying I'm not -- y'all didn't hire me to make
04:51 3 the decision. We have seven people who are going to do
04:51 4 that. So how would I possibly rule in your favor on
04:51 5 that issue?

04:51 6 MR. SIEGMUND: We're making our record,
04:51 7 Your Honor. We believe because of the things I just
04:51 8 said, I don't expect the Court to agree, that's the --

04:51 9 THE COURT: Again, I'm not taking a
04:51 10 position on any of those issues. I'm saying this is --
04:51 11 as a Rule 56 -- Rule 50 motion. I only know two of the
04:51 12 rules and those are the two. Well, I know Rule 12 too.

04:51 13 But at any rate, I'm going to deny that
04:51 14 one.

04:51 15 MR. SIEGMUND: Understood.

04:51 16 THE COURT: What's next?

04:51 17 MR. SIEGMUND: The last one's damages,
04:51 18 Your Honor.

04:51 19 Again, we move as a matter of law for SVV
04:51 20 failed to calculate royalties based on the smallest
04:52 21 salable patent unit and -- as well as they failed to
04:52 22 apportion. Specifically, Dr. Farber's regression model
04:52 23 utilizes the cost of the entire display monitor to
04:52 24 ascertain any cost savings supposedly attributable to
04:52 25 the patented technology.

04:52 1 And I think all the -- the experts from
04:52 2 both sides have agreed that the patents-in-suit did not
04:52 3 invent the entire display module. What's at issue in
04:52 4 this case is the backlight panel. That's where the
04:52 5 accused functionality is directed.

04:52 6 So therefore, any cost savings that can
04:52 7 be attributed to the patent technology should only be
04:52 8 directed to the cost savings of the backlight panel.

04:52 9 Additionally, Dr. Farber fails to
04:52 10 apportion to what the patented technology actually
04:52 11 provides to ASUS, as was just stated. It's undisputed
04:52 12 the patents did not invent the backlight, all the
04:52 13 components that go in it, let alone the cost of the
04:52 14 entire monitor.

04:52 15 In our view, Dr. Farber does not account
04:52 16 for this in his analysis; therefore, he failed to
04:52 17 apportion down to the patented technology.

04:53 18 And then finally, Dr. Farber, in our
04:53 19 view, failed to provide the jury with any evidence of a
04:53 20 per-patent royalty, and we believe this is improper.

04:53 21 And those are our motions, Your Honor.

04:53 22 THE COURT: Okay. Those are respectfully
04:53 23 overruled.

04:53 24 What else do we have to take up?

04:53 25 MR. BURESH: Nothing for defendant,

04:53 1 Your Honor.

04:53 2 MR. MCCARTY: We do have some remaining
04:53 3 objections for their technical expert. We have to take
04:53 4 them up in the morning. They relate to a couple of
04:53 5 slides.

04:53 6 THE COURT: Let's take that up in the
04:53 7 morning. I think that makes the most sense.

04:53 8 Okay. If you all -- you all -- again,
04:53 9 the courtroom's open. You're welcome to come in any
04:53 10 time. We'll start at 9:00. As soon as I'm done with
04:53 11 sentencings, we'll bring the jury in and we'll start
04:53 12 with defendant's first witness. I'll see you tomorrow.

04:53 13 (Hearing adjourned.)

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1 UNITED STATES DISTRICT COURT)
2 WESTERN DISTRICT OF TEXAS)
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4

5 I, Kristie M. Davis, Official Court
6 Reporter for the United States District Court, Western
7 District of Texas, do certify that the foregoing is a
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10 I certify that the transcript fees and
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12 Judicial Conference of the United States.

13 Certified to by me this 3rd day of
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15
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04:53

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

SVV TECHNOLOGY *
INNOVATIONS, INC. *
* September 25, 2024
VS. *
* CIVIL ACTION NO. 6:22-CV-311
ASUSTEK COMPUTER INC. *

BEFORE THE HONORABLE ALAN D ALBRIGHT
JURY TRIAL PROCEEDINGS
Volume 3 of 4

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10:14 1 (Hearing begins.)

10:14 2 THE BAILIFF: All rise.

10:14 3 THE COURT: Thank you. You may be
4 seated.

10:14 5 My understanding is there are a couple of
10:14 6 issues to take up.

10:14 7 Good morning.

10:14 8 MR. MCCARTY: Good morning, Your Honor.
10:14 9 Warren McCarty for the plaintiff.

10:14 10 This is the -- I think the third time to
10:15 11 try to get this objection brought before you, and
10:15 12 coincidentally, the objection is that this is the third
10:15 13 time that the defendant is trying to introduce this
10:15 14 theory through their expert that Your Honor's already
10:15 15 stricken.

10:15 16 If you recall from the pretrial
10:15 17 conference, Your Honor granted our motion to exclude
10:15 18 opinions of their technical expert on two claim terms.
10:15 19 That's "light harvesting" and "light converting."

10:15 20 Put that on the ELMO, Mr. Diaz. Thank
10:15 21 you.

10:15 22 And that's Docket 154.

10:15 23 And the issue was -- and why Your Honor
10:15 24 struck the witness and his testimony is it was
10:15 25 contradicting Your Honor's claim construction. He

10:15 1 rejected -- Your Honor rejected their position in claim
10:15 2 construction, and then the technical witness,
10:15 3 nevertheless, tried to insert that rejected position
10:15 4 into his noninfringement argument. So Your Honor
10:15 5 excluded that witness on those terms.

10:15 6 We see their slides, and we see that the
10:16 7 testimony that we can anticipate from this witness is
10:16 8 delving right into those stricken opinions.

10:16 9 So this is, you know, like open up the
10:16 10 slides. And the very first slide we see on any
10:16 11 substance is all about the claim terms that Your Honor
10:16 12 has stricken this witness from discussing,
10:16 13 light-harvesting device, or the issues in the case.

10:16 14 If we go to Slide, I think, 19 -- and I
10:16 15 can pass these up to Your Honor. Just a sec.

10:16 16 Slide 17, the same thing, talking all
10:16 17 about the conversion of light into electricity. This
10:16 18 is opinions that Your Honor has stricken.

10:16 19 And so I'm raising it because, you know,
10:16 20 I can object live, we can have bench conferences or,
10:16 21 you know, we can deal with it now. I think our
10:16 22 position is we need to stick to what Your Honor has
10:16 23 ordered and excluding this individual's opinion.

10:16 24 And one other additional thing is if we
10:17 25 look at kind of the ticket to testify that Dr. Goossen

10:17 1 has, which is his -- you know, which is his report, the
10:17 2 two portions of the report that were stricken are A and
10:17 3 B. That's Pages 15 through 29. It ends here.

10:17 4 So 15 through 29 are excluded. And, you
10:17 5 know, things like light harvesting, that's a big part
10:17 6 of what he wants to talk about, light trapping, that
10:17 7 sort of thing. All of that in his report is found only
10:17 8 in those sections that have been stricken.

10:17 9 So slides like 17, where he wants to talk
10:17 10 all about light trapping, is not even supported in his
10:17 11 report. So in addition to having been stricken, it's
10:17 12 necessarily going to be outside the scope. That's the
10:17 13 objection, Your Honor.

10:17 14 So ultimately, we think that the slides
10:17 15 should be taken out and the witness should be
10:17 16 prohibited from testifying about the issues that
10:18 17 Your Honor has already stricken and -- as contrary to
10:18 18 the Court's claim construction.

10:18 19 Thank you.

10:18 20 MR. BURESH: Your Honor, first, let me
10:18 21 just start by saying very clearly, we are not going to
10:18 22 offer any opinions that are inconsistent with the
10:18 23 Court's claim constructions or the Daubert ruling.
10:18 24 There will be no testimony from Dr. Goossen saying that
10:18 25 the claims are not infringed because our systems are

10:18 1 not light-trapping or light-harvesting systems. That
10:18 2 is not going to be his opinion.

10:18 3 And Your Honor's Daubert ruling did not
10:18 4 strike pages of an expert report. It struck those
10:18 5 opinions. Dr. Goossen is simply going to provide the
10:18 6 context like we've been doing throughout the case.

10:18 7 THE COURT: I'll take it up as you go. I
10:18 8 mean, he's -- it's in the spec. You're welcome to talk
10:18 9 about the spec. It's -- and so if the plaintiff has an
10:19 10 issue with what you are asking him, he can object and
10:19 11 I'll rule on it at that time.

10:19 12 MR. BURESH: Thank you, Your Honor.

10:19 13 THE COURT: Anything else?

10:19 14 MR. MCCARTY: Not for the plaintiff.

10:19 15 THE COURT: Jurors are all here? We're
10:19 16 going to go back. We'll get lined up and come out.

10:19 17 THE BAILIFF: All rise.

10:19 18 (Pause in proceedings.)

10:21 19 THE BAILIFF: All rise.

10:21 20 THE COURT: Please remain standing for
10:21 21 the jury.

10:21 22 (Jury entered the courtroom.)

10:21 23 THE COURT: Thank you. You may be
10:21 24 seated.

10:21 25 Yes, ma'am.

10:21 1 MS. MARRIOTT: Your Honor, we call
10:21 2 Mr. James Lee.

10:22 3 DIRECT EXAMINATION

10:22 4 BY MS. MARRIOTT:

10:22 5 Q. Good morning, Mr. Lee. It's nice to see you
10:22 6 again.

10:22 7 A. Hello, everyone.

10:22 8 Q. Could you please remind the jury what you do
10:22 9 at ASUS?

10:22 10 A. I am the director of the -- I'm a project
10:23 11 manager in the -- of the -- excuse me.

10:23 12 I'm the director of the division for -- one
10:23 13 moment, please.

10:23 14 The director of the division for the
10:23 15 department of displays.

10:23 16 Q. And does the department of displays include
10:23 17 the monitors that are at issue in this case?

10:23 18 A. It does.

10:23 19 Q. Can you describe your role as the division
10:23 20 director in the display business unit?

10:23 21 A. I'm in charge of product planning, which
10:24 22 includes defining the specifications for our products
10:24 23 and other characteristics such as sales price.

10:24 24 CHECK INTERPRETER: Check interpreter
10:24 25 adding one more thing. He also mentioned the timing

10:24 1 for the mass production.

10:24 2 BY MS. MARRIOTT:

10:24 3 Q. Mr. Lee, have you traveled a long way to speak
10:24 4 with the jury today?

10:24 5 A. Yes. I was traveling for about -- I had a
10:25 6 15-hour flight, and then I took another 3 hours by car.
10:25 7 So yes.

10:25 8 Q. Have you ever testified in court before?

10:25 9 A. No.

10:25 10 Q. And why are you here to testify?

10:25 11 A. Well, that's because I'm in charge of planning
10:25 12 for displays and I've been working in the display
10:25 13 department since 2005, and I think I'm the best and
10:25 14 most appropriate person to be here today.

10:25 15 Q. Are you the leader of the group?

10:25 16 A. Yes. I am the lead PM.

10:26 17 Q. Okay. Why didn't you send an engineer?

10:26 18 A. Well, as I explained yesterday, our company
10:26 19 does not -- is not a manufacturer of panels, and so we
10:26 20 do not have in-depth knowledge of the panels and
10:26 21 technologies.

10:26 22 Q. Now, Mr. Lee, did you bring a set of slides to
10:26 23 help with your testimony to the jury today?

10:26 24 A. I did.

10:26 25 Q. Could you please describe your education, your

10:26 1 background education for the jury?

10:26 2 A. I attended Tsing Hua University in Taiwan. I
10:27 3 graduated in 1993 with a -- with my bachelor's in power
10:27 4 mechanical engineering. I then followed that with my
10:27 5 studies for a master's degree in United States from
10:27 6 1997 to 1999.

10:27 7 Q. What did you do in between getting your
10:27 8 engineering degree and your master's degree?

10:27 9 A. I completed my military service for a period
10:28 10 of two years, and I also worked as a mechanical
10:28 11 engineer for one year.

10:28 12 Q. Are you in charge of product planning for the
10:28 13 ASUS monitors at issue in this case?

10:28 14 A. I am.

10:28 15 Q. What is involved in product planning?

10:28 16 A. As I mentioned before, I'm in charge of
10:29 17 defining the specifications for our products. I'm also
10:29 18 responsible for the pricing of the products and the
10:29 19 timelines relating to the products. In addition, I do
10:29 20 have meetings with the panel manufacturers.

10:29 21 Q. And in your position, how many people report
10:29 22 to you?

10:29 23 A. Currently 27 or 28 PMs.

10:29 24 Q. How long have you personally worked in the
10:29 25 field of LCD displays?

10:29 1 A. I've been responsible for LCD TVs since 2005.

10:30 2 CHECK INTERPRETER: The check interpreter

10:30 3 correction is 2002.

10:30 4 THE INTERPRETER: 2002.

10:30 5 BY MS. MARRIOTT:

10:30 6 Q. And in 2002, what type of LCD products were

10:30 7 you working on?

10:30 8 A. LCD TVs.

10:30 9 Q. What was your role in working on LCD TVs back

10:30 10 in 2002?

10:30 11 A. I was also a PM at that time.

10:30 12 Q. Okay. And that's a project manager?

10:30 13 A. Yes.

10:30 14 Q. When did you join ASUS?

10:30 15 A. In 2005.

10:31 16 Q. When you were hired by ASUS in 2005, at that

10:31 17 time, what was the primary focus of ASUS' business?

10:31 18 A. Motherboards and laptop computers.

10:31 19 Q. Were you hired by ASUS specifically for the

10:31 20 display business units?

10:31 21 A. Yes.

10:31 22 Q. How big was ASUS' display business unit when

10:31 23 you first joined in 2005?

10:31 24 A. There were only four people at the time. I

10:32 25 became the fifth.

10:32 1 Q. Were you the first person hired from outside
10:32 2 the company for the display business unit?

10:32 3 A. Yes.

10:32 4 Q. Mr. Lee, were you a part of ASUS' monitors
10:32 5 business from the very beginning?

10:32 6 A. Yes.

10:32 7 Q. What was the first standalone LCD ASUS
10:32 8 monitor?

10:32 9 A. PM17TU.

10:33 10 Q. Is that what the jury's seeing here on the
10:33 11 screen?

10:33 12 A. Yes. It is.

10:33 13 Q. And when was it released?

10:33 14 A. 2005.

10:33 15 Q. And what type of backlighting did this 2005
10:33 16 LCD ASUS monitor use?

10:33 17 A. Edge lighting.

10:33 18 Q. So ASUS has been producing edge-lit LCD
10:33 19 monitors since 2005?

10:33 20 A. Yes.

10:34 21 Q. Okay. Mr. Lee, what was the brightness on
10:34 22 this ASUS display from 2005?

10:34 23 A. 400 nits.

10:34 24 Q. And how does that relate to ASUS panels
10:34 25 generally today?

10:34 1 A. Well, currently monitor brightness is
10:34 2 generally between 250 and 300 nits.

10:34 3 Q. So was the 400-nit 2005 LCD monitor brighter
10:34 4 generally than the panels today?

10:34 5 A. Yes.

10:35 6 Q. Now, when did ASUS first start producing LCD
10:35 7 monitors with LED edge lighting?

10:35 8 A. In 2007.

10:35 9 Q. Now, since joining ASUS in 2005, have you been
10:35 10 involved in the product planning for nearly every
10:35 11 monitor that ASUS has produced?

10:35 12 A. Yes.

10:35 13 Q. And today, who is ASUS' number one competitor
10:36 14 overall in the LCD monitor market?

10:36 15 A. Samsung.

10:36 16 Q. Are Samsung's sales of LCD displays larger
10:36 17 than ASUS' sales of LCD displays generally?

10:36 18 A. Yes.

10:36 19 Q. Thank you.

10:36 20 Now, based on your 20 years of experience in
10:36 21 the industry, have you generally become familiar with
10:36 22 what an LCD panel is?

10:36 23 A. Yes. I do have basics -- a basic
10:37 24 understanding of them.

10:37 25 Q. Okay. And can you explain for the jury what

10:37 1 your basic understanding of an LCD panel is?

10:37 2 A. So there -- first of all, there are two panels
10:37 3 of glass in between which is a layer of liquid crystal.
10:37 4 This is called open sale -- open cell. And the other
10:37 5 part of it is the backlight module.

10:37 6 Q. When ASUS got into the monitor business in
10:38 7 2005, was this LCD backlight module technology already
10:38 8 widely available?

10:38 9 A. Yes. It was.

10:38 10 Q. And that would include a light guide plate?

10:38 11 A. Yes. It does.

10:38 12 Q. Did that include optical films?

10:38 13 A. Yes.

10:38 14 Q. And over the past 20 years that you've been in
10:38 15 the industry, Mr. Lee, has this basic structure of an
10:38 16 LCD panel that you just described changed?

10:38 17 A. It has not changed in any major ways.

10:39 18 Q. Mr. Lee, do ASUS customers care about the
10:39 19 backlight module that's used in the display?

10:39 20 A. Well, actually, the consumer doesn't really
10:39 21 know what the backlight module is.

10:39 22 Q. Now -- excuse me.

10:39 23 Other than the LCD panel which we've been
10:39 24 hearing about throughout this trial, are there other
10:39 25 components in ASUS' monitors?

10:39 1 A. Yes. Yes. There are other electronic boards.
10:40 2 There are power boards. There are also plastic and
10:40 3 metal structural components.

10:40 4 Q. Okay. Mr. Lee, what am I holding?

10:40 5 A. That's a power supply board and a scaler
10:40 6 board.

10:40 7 Q. Can you describe for the jury which one is the
10:40 8 power board? What color is it?

10:40 9 A. The blue one is the power board.

10:40 10 Q. Okay. And which one is the scaler board?

10:41 11 A. The green one.

10:41 12 Q. And what does the scaler board do?

10:41 13 A. It receives signals from a computer and
10:41 14 converts them or transmits them to the LCD displays.

10:41 15 Q. Now, does this also contain ports?

10:41 16 A. Yes.

10:41 17 Q. Are these the ports, Mr. Lee?

10:41 18 A. Yes.

10:41 19 Q. And what do you do with the ports? What are
10:41 20 they for?

10:41 21 A. They are responsible for the connection with
10:42 22 the PC.

10:42 23 Q. Now, Mr. Lee, does ASUS develop the LCD panels
10:42 24 that are in its computer monitors?

10:42 25 A. No.

10:42 1 Q. Who develops them?

10:42 2 A. External panel manufacturers.

10:42 3 Q. So are those third-party vendors?

10:42 4 A. Yes.

10:42 5 Q. And has ASUS used third-party panel
10:43 6 manufacturers in its displays ever since 2005?

10:43 7 A. Yes. We have been doing that since 2005.

10:43 8 Q. Now, Mr. Lee, I'd like to ask you some
10:43 9 questions now about the two representative monitors
10:43 10 that we've been hearing about in this case. Okay?

10:43 11 A. Okay.

10:43 12 Q. Okay.

10:43 13 MS. MARRIOTT: Your Honor, permission to
10:43 14 show the monitors.

10:43 15 THE COURT: Of course.

10:43 16 MS. MARRIOTT: Thank you.

10:43 17 BY MS. MARRIOTT:

10:44 18 Q. Okay. Mr. Lee, do you recognize this monitor?

10:44 19 A. Yes. I recognize it.

10:44 20 Q. Okay. What is it?

10:44 21 A. It is the PA278CV.

10:44 22 Q. And what type of monitor is this by brand or
10:44 23 by -- no.

10:44 24 How does ASUS refer to the type of monitor
10:44 25 that this is?

10:44 1 A. It's a professional monitor.

10:44 2 Q. Okay. Is it referred to as a ProArt monitor?

10:44 3 A. Yes.

10:45 4 MS. MARRIOTT: Okay. Move to admit
10:45 5 DTX-1973.

10:45 6 MR. CALDWELL: No objection.

10:45 7 THE COURT: Admitted.

10:45 8 BY MS. MARRIOTT:

10:45 9 Q. And, Mr. Lee, this is one of the
10:45 10 representative products that we've been hearing about
10:45 11 throughout this case?

10:45 12 A. Yes.

10:45 13 Q. Now, the second monitor that's before the
10:45 14 jury, do you recognize this monitor?

10:45 15 A. I do.

10:45 16 Q. Okay. What is it?

10:45 17 A. It is the PG32UQ.

10:45 18 Q. And what line of monitor is the PG32UQ?

10:45 19 A. It is part of the ROG gaming monitors line.

10:46 20 MS. MARRIOTT: Move to admit DTX-1972.

10:46 21 MR. CALDWELL: No objection.

10:46 22 THE COURT: Admitted.

10:46 23 BY MS. MARRIOTT:

10:46 24 Q. Is this monitor, this ROG monitor, is this the
10:46 25 other representative product in this case?

10:46 1 A. It is.

10:46 2 Q. Mr. Lee, did you personally work on both of
10:46 3 these two monitors that are before the jury?

10:46 4 A. I did.

10:46 5 Q. Do both of these monitors have an edge-lit LCD
10:46 6 display?

10:46 7 A. They do.

10:46 8 Q. Now, first, let's talk about this monitor.
10:46 9 Okay? This ROG Swift.

10:47 10 Who is the target customer for the ROG
10:47 11 monitor?

10:47 12 A. Gamers.

10:47 13 Q. Okay. And I believe you mentioned that the
10:47 14 number of this model was PG32UQ.

10:47 15 Could you please describe for the jury what
10:47 16 that means?

10:47 17 A. The PG refers to the fact that it is intended
10:48 18 for gamers. The 32 refers to the size. The U is the
10:48 19 resolution, 4K in this case. The Q refers to the fact
10:48 20 that it has HDMI and display port -- IO ports.

10:48 21 Q. Was this ROG Swift monitor that the jury is
10:48 22 looking at, was that the first gaming monitor that ASUS
10:48 23 ever produced?

10:48 24 A. No.

10:48 25 Q. What was the first gaming monitor that ASUS

10:48 1 produced?

10:48 2 A. PG191.

10:49 3 Q. And is that monitor what the jury's looking at
10:49 4 on the slide?

10:49 5 A. It is.

10:49 6 Q. What kind of backlighting was used in this
10:49 7 2006 gaming monitor?

10:49 8 A. Edge lighting.

10:49 9 Q. Mr. Lee, what are the most important
10:49 10 specifications for gaming monitors and this ROG Swift
10:49 11 in particular?

10:49 12 A. Refresh rate and response time.

10:49 13 Q. Why is the refresh rate important?

10:49 14 A. That's because they -- as the -- gamers, they
10:50 15 want the ability to see very quickly the enemy as they
10:50 16 appear on the screen and to take action immediately.

10:50 17 Q. Does the refresh rate have anything to do with
10:50 18 the backlight module of the LCD panel?

10:50 19 A. No.

10:50 20 Q. Now, you mentioned response time.

10:50 21 Why is that important?

10:50 22 A. Well, that's because the -- that the response
10:51 23 time affects how quickly or the time point that an
10:51 24 image will appear on the screen. So the shorter it is,
10:51 25 the better.

10:51 1 Q. Does response time have anything to do with
10:51 2 the backlight module in the LCD panel?

10:51 3 A. No.

10:51 4 Q. Is the viewing angle of the monitor an
10:51 5 important feature?

10:51 6 A. It is.

10:51 7 Q. What does the viewing angle refer to
10:51 8 generally?

10:51 9 A. It refers to the ability of the consumer to
10:51 10 see the image on the screen from different angles.

10:52 11 Q. Do customers want a wide viewing angle or a
10:52 12 narrow viewing angle?

10:52 13 A. A wide viewing angle.

10:52 14 Q. Are these the specifications of the ROG
10:52 15 monitor that are being shown on the display?

10:52 16 A. Yes.

10:52 17 Q. What is the viewing angle of the ROG Swift
10:52 18 monitor that the jury's looking at?

10:52 19 A. 178 degrees horizontal and vertical.

10:52 20 Q. Is a wide viewing angle, so 178 degrees,
10:52 21 specifically and particularly important to gaming
10:53 22 consumers?

10:53 23 A. Yes. 178 degrees is important to gamers.

10:53 24 Q. Why?

10:53 25 A. That's because the gamer will not necessarily

10:53 1 only sit directly in front of the monitor, they would
10:53 2 be in different positions.

10:53 3 CHECK INTERPRETER: The check interpreter
10:53 4 add one more thing.

10:53 5 When gaming, their physical body would
10:53 6 move around sometimes.

10:53 7 THE INTERPRETER: Yes. Thank you.

10:53 8 BY MS. MARRIOTT:

10:53 9 Q. Mr. Lee, are you familiar with the term
10:53 10 "quantum dot technology"?

10:53 11 A. I have a basic understanding of it.

10:54 12 Q. Did the ROG Swift that is at issue in this
10:54 13 case utilize quantum dot technology?

10:54 14 A. It did.

10:54 15 Q. Okay. What percent of ASUS monitors generally
10:54 16 have used quantum dot technology?

10:54 17 A. Less than 1 percent.

10:54 18 Q. Is ASUS still making this ROG Swift monitor?

10:54 19 A. We have not been making it since the first
10:55 20 half of 2024.

10:55 21 Q. Is it your understanding, Mr. Lee, that only
10:55 22 five of the ASUS monitors that are at issue
10:55 23 specifically in this case utilize quantum dot
10:55 24 technology?

10:55 25 A. Yes.

10:55 1 Q. Are any of those five quantum dot monitors
10:55 2 still being made by ASUS?

10:55 3 A. No. None of them are being made any longer.

10:55 4 CHECK INTERPRETER: The interpreter wants
10:55 5 to -- check interpreter wants to clarify the Chinese
10:56 6 with the witness.

10:56 7 A. We are not making those anymore.

10:56 8 BY MS. MARRIOTT:

10:56 9 Q. Thank you.

10:56 10 Now, let's talk about the second of the ASUS
10:56 11 monitors in this case, which is the ProArt monitor.
10:56 12 Okay?

10:56 13 A. Okay.

10:56 14 Q. Did you work on the PA278CV ProArt monitor?

10:56 15 A. I did.

10:56 16 Q. And just like we did for the first monitor,
10:56 17 could you describe for the jury what the name PA278CV
10:57 18 means?

10:57 19 A. The PA refers to the name ProArt and that it
10:57 20 is intended for professional users. The 27 together
10:57 21 refer to the size of the monitor. The 8 refers to the
10:57 22 resolution, QHD. The C refers to the USB-C IO port.
10:57 23 And the V refers to the fact that this is one of the
10:57 24 more affordable monitors.

10:57 25 Q. You mentioned professional users.

10:58 1 Who is the target consumer for ProArt
10:58 2 monitors?

10:58 3 A. It is mainly for those people who work on
10:58 4 artistic design and for those who work on video
10:58 5 production.

10:58 6 Q. What specifications are the most important to
10:58 7 ProArt customers?

10:58 8 A. Color accuracy.

10:58 9 Q. Does the ProArt PA278CV that's at issue in
10:58 10 this case use quantum dot technology?

10:58 11 A. No.

10:59 12 Q. Mr. Lee, are we looking at the specifications
10:59 13 for the ProArt monitor?

10:59 14 A. Yep.

10:59 15 Q. What is the viewing angle of the ProArt
10:59 16 monitor?

10:59 17 A. 178 degrees horizontal and vertical.

10:59 18 Q. And why is the viewing angle of the monitor
10:59 19 important for these professional users that you just
10:59 20 described?

10:59 21 A. That's because of people who are working on
11:00 22 artistic designs would be -- there may be several of
11:00 23 them using -- looking at the same monitor. So they'll
11:00 24 be in different positions and looking at it from
11:00 25 different angles.

11:00 1 Q. And, Mr. Lee, does ASUS have any alternative
11:00 2 panels that it uses instead of LCD?

11:00 3 A. Over the past couple of years, we've begun to
11:00 4 use OLED panels.

11:00 5 Q. Do OLED panels have a backlight module?

11:00 6 A. No.

11:00 7 Q. Mr. Lee, would an ASUS customer ever want a
11:01 8 monitor that traps light inside -- traps light inside
11:01 9 the display?

11:01 10 A. No.

11:01 11 Q. Why not?

11:01 12 A. Because the users would want to see the images
11:01 13 on the screen. If the light were trapped inside, they
11:01 14 would not be able to see it.

11:01 15 Q. Would ASUS consumers want the monitors to
11:01 16 shoot light straight out of the display in beams?

11:01 17 A. No.

11:02 18 Q. Why not?

11:02 19 A. Because as I just explained, the consumer
11:02 20 would be looking at the monitor from different angles.

11:02 21 Q. Okay. Would it be possible for an ASUS
11:02 22 customer to see the screen from 178-degree viewing
11:02 23 angle if the monitor was shooting light straight out?

11:02 24 A. I think they would not see it.

11:02 25 Q. Now, Mr. Lee, you remember the e-mails that

11:03 1 the jury's seen and that we've talked about through the
11:03 2 trial between Mr. Katz, SVV's lawyer, and Mr. Wu at
11:03 3 ASUS regarding the patents at issue in this case?

11:03 4 A. I remember them.

11:03 5 Q. And you saw Mr. Wu was communicating with
11:03 6 Mr. Katz?

11:03 7 A. Yes.

11:03 8 Q. Was Mr. Wu providing Mr. Katz with
11:04 9 information?

11:04 10 A. Yes.

11:04 11 Q. And those communications went all the way
11:04 12 through February of 2022? Is that your understanding?

11:04 13 A. Yes.

11:04 14 Q. What happened one month later?

11:04 15 A. ASUS was sued by SVVTI.

11:04 16 Q. How did you personally find out about the
11:04 17 filing of this lawsuit?

11:04 18 A. Jason Wu sent me an e-mail about it.

11:04 19 Q. Why did he send you an e-mail about it?

11:04 20 A. Because I was -- I am the head of the -- I'm
11:05 21 the PM head for this monitors department.

11:05 22 Q. Did Mr. Wu ask you for your help?

11:05 23 A. He did.

11:05 24 Q. And at a high level, what did Mr. Wu ask you
11:05 25 to help with?

11:05 1 A. He asked me to provide a table or a chart,
11:05 2 corresponding model numbers to panels, and also for
11:05 3 technical information from the panel manufacturers.

11:05 4 Q. What did you do once Mr. Wu reached out to
11:06 5 you?

11:06 6 A. We started to collect the information that
11:06 7 they were requesting and also got in touch with
11:06 8 technical people from the manufacturers.

11:06 9 Q. Did Mr. Wu tell you how many ASUS models were
11:06 10 involved in that process?

11:06 11 A. As I recall, it was 100 to 200 different
11:06 12 models.

11:06 13 Q. How difficult was it to track down information
11:06 14 for 100 to 200 different ASUS models?

11:06 15 A. It was very difficult.

11:07 16 Q. Is that a pretty big project for you and your
11:07 17 team?

11:07 18 A. It was.

11:07 19 Q. And as the information started to come in from
11:07 20 the panel vendors, the panel companies making the LCD
11:07 21 panels, what did you do with that information?

11:07 22 A. That's when we started to investigate whether
11:07 23 any of these panels were infringing.

11:08 24 Q. And who was involved in that process?

11:08 25 A. The people involved in that process were legal

11:08 1 engineers from ASUS, our display engineers, myself, and
11:08 2 the engineers working at the panel manufacturers, the
11:08 3 vendors.

11:08 4 Q. Was Mr. Wu involved in that process?

11:08 5 A. Yes.

11:08 6 Q. So all of these people were working together
11:08 7 as the information became -- started coming in from the
11:08 8 panel makers; is that correct?

11:09 9 A. Yes.

11:09 10 Q. And what did you find through this
11:09 11 investigation?

11:09 12 A. That ASUS monitors were not infringing.

11:09 13 Q. Thank you.

11:09 14 MS. MARRIOTT: Pass the witness.

11:09 15 CROSS-EXAMINATION

11:09 16 BY MR. CALDWELL:

11:09 17 Q. Hi, sir. Again, my name is Brad Caldwell.

11:09 18 Did you just -- sorry -- did you just offer a
11:09 19 lay opinion that the patents aren't infringed based on
11:10 20 the fact that you don't have a technical understanding
11:10 21 of the patents?

11:10 22 A. Are you asking me personally or ASUS?

11:10 23 Q. I honestly don't understand the difference.
11:10 24 Is the difference whether you're going to tell me your
11:10 25 personal opinion not having a technical understanding

11:10 1 of the patents, or you're just going to give me hearsay
11:10 2 from somebody else you heard? Is that the difference?

11:10 3 A. Well, of course. I'm not a technical person,
11:11 4 but there are engineers in our company, and this was
11:11 5 relayed also to the engineers at the panel
11:11 6 manufacturers.

11:11 7 Q. I see. So it's all just hearsay, and none of
11:11 8 those people who allegedly have that opinion can be
11:11 9 bothered to come here and testify, right?

11:12 10 THE INTERPRETER: The interpreter would
11:12 11 like to ask him to repeat.

11:12 12 A. I have confidence in the determination and the
11:12 13 results that those engineers from ASUS and the
11:12 14 engineers from the panel manufacturers worked to
11:12 15 provide.

11:12 16 BY MR. CALDWELL:

11:12 17 Q. But literally nobody is going to present those
11:12 18 opinions from engineers at ASUS or from some panel
11:12 19 manufacturer because none of them can be bothered to
11:12 20 come here and testify, correct?

11:12 21 A. That's why we asked for technical experts to
11:12 22 assist us in this.

11:13 23 Q. Okay. Because you're telling us, this
11:13 24 hearsay, that there's a bunch of other people who would
11:13 25 say something good for ASUS, but they're not here and

11:13 1 the person who is here is a paid expert.

11:13 2 That's the complete picture, correct?

11:13 3 A. But the results of the technical analysis are
11:13 4 the same.

11:13 5 Q. Nobody's going to present that technical
11:13 6 analysis, correct? Nobody from ASUS or its vendors,
11:13 7 correct?

11:13 8 A. They didn't -- were not able to come this
11:14 9 time, but we do have technical people to explain.

11:14 10 Q. Your outside paid technical witness, right?

11:14 11 A. As far as I know, yes.

11:14 12 Q. Now, do you recall there was some suggestion
11:14 13 that it was a problem that SVV filed a lawsuit
11:14 14 approximately a year after we had reached out to ASUS?

11:14 15 A. I do remember that, but I also recall that in
11:15 16 April of 2021, Jason Wu responded to SVVTI and their
11:15 17 request from the lawyers for the claim charts.

11:15 18 Q. Okay. My question is about the testimony you
11:15 19 just gave in this court. And you guys acted like it
11:15 20 was wrong or bad for SVV to file suit when it did.

11:15 21 Do you remember giving that testimony?

11:16 22 MS. MARRIOTT: Your Honor --

11:16 23 THE COURT: Hold on.

11:16 24 MS. MARRIOTT: Your Honor, we would
11:16 25 object to that as a mischaracterization of his

11:16 1 testimony.

11:16 2 THE COURT: Overruled.

11:16 3 A. Could you please repeat your question?

11:16 4 BY MR. CALDWELL:

11:16 5 Q. Sir, do you remember at least testifying that
11:16 6 after SVV filed the lawsuit, Jason Wu sent you an
11:17 7 e-mail? He reached out to you?

11:17 8 Do you at least remember that?

11:17 9 A. I remember that.

11:17 10 Q. And then you went to do research on the
11:17 11 monitors and gathered all this information you
11:17 12 testified about, correct?

11:17 13 A. I just said that we began to collect
11:17 14 information.

11:17 15 Q. Exactly. It's a good thing that SVV sued,
11:17 16 right, because when would you have ever begun to
11:17 17 collect relevant information if we hadn't filed suit
11:18 18 against you?

11:18 19 A. No.

11:18 20 Q. Well, why did Jason Wu wait until after we
11:18 21 sued ASUS to reach out to the head of the monitor team?

11:18 22 A. He was waiting for SVVTI to provide the claim
11:18 23 charts so that he could analyze them.

11:18 24 Q. And then he waited another month until we
11:18 25 filed the lawsuit per your own testimony in this court,

11:18 1 correct?

11:18 2 A. No. No. Because we were in consistent
11:19 3 communication through February of 2022.

11:19 4 Q. Yesterday when I walked you through the
11:19 5 Jason Wu e-mail chain, do you remember how I pointed
11:19 6 out that he was saying, we don't know who makes our
11:19 7 panels and we don't know their contact information at
11:19 8 the same time you had all that information?

11:19 9 Do you remember when we had this discussion?

11:19 10 A. I recall that Jason Wu provided the contact
11:20 11 information for AUO.

11:20 12 Q. My question was, do you remember discussing it
11:20 13 with me yesterday? Do you remember our discussion
11:20 14 yesterday?

11:20 15 A. Yes.

11:20 16 Q. So were you or were you not in regular contact
11:20 17 with Jason Wu when he sent us an e-mail saying they do
11:21 18 not know their panel manufacturers?

11:21 19 A. As I said yesterday, I started to be in closer
11:21 20 communication with Jason Wu beginning in 2022 about
11:21 21 this matter.

11:21 22 Q. After we sued ASUS, right?

11:21 23 A. Yes.

11:21 24 Q. Where in the U.S. did you get your master's
11:21 25 degree over a two- to three-year period?

11:21 1 A. George Washington in Washington, D.C.

11:22 2 Q. And what is your master's degree in?

11:22 3 A. M.B.A.

11:22 4 Q. I'd like to talk to you a little bit about
11:22 5 some of these early monitors that you showed. You
11:22 6 understand that the parties in this case have a
11:22 7 stipulation of products that can be represented by
11:22 8 other products, correct?

11:22 9 A. Can you please explain clearly that
11:23 10 stipulation between the parties?

11:23 11 Q. Sir, the monitors you guys had in 2005, 2006,
11:23 12 and 2007 are very different from the accused products
11:23 13 in this case, correct?

11:23 14 A. The ones at that time were 17- and 19-inch
11:23 15 4-by-3 display ratio displays.

11:24 16 Q. Did they use a TN LCD panel or did they use
11:24 17 in-plane switching?

11:24 18 A. TN. TN.

11:24 19 Q. Now, in case you and I are talking a little
11:24 20 bit of jargon, can you explain what that means for it
11:24 21 to be a TN panel versus an IPS panel that was used in
11:24 22 that monitor?

11:24 23 A. Well, TN and IPS are different types of
11:25 24 display technologies. But we are not a panel
11:25 25 manufacturer, so I can't explain the technical

11:25 1 differences.

11:25 2 Q. But you do know some of the marketing and
11:25 3 sales kind of differences between them, correct?

11:25 4 A. I do.

11:25 5 Q. Okay. And one of the very well-known
11:25 6 differences between TN and IPS panels is the viewing
11:25 7 angle, isn't it?

11:25 8 A. Yes.

11:26 9 MR. CALDWELL: Mr. Diaz, may I have his
11:26 10 drawing that sort of blew out all the different layers?

11:26 11 BY MR. CALDWELL:

11:26 12 Q. Do you remember showing this drawing?

11:26 13 A. I do.

11:26 14 Q. And let's just kind of look at the thing
11:26 15 that's on the top half. On the far right is the
11:26 16 backlight unit.

11:26 17 Do you see that?

11:26 18 A. I do.

11:26 19 Q. Now, if an LCD monitor used an IPS, an
11:26 20 in-plane switching panel, or a TN panel, where would
11:26 21 that be in this stack?

11:26 22 A. Liquid crystal.

11:27 23 Q. So the backlight would send light straight
11:27 24 through, in this example, the polarizer and the glass
11:27 25 and the TFT array, and then it would get to the liquid

11:27 1 crystal portion of the display, correct?

11:27 2 A. Yes.

11:27 3 Q. And at that portion, the liquid crystal,
11:27 4 whether it is a TN, a twisted pneumatic panel, or an
11:28 5 IPS, an in-plane switching panel, that's where the
11:28 6 light would either be able to stretch out to
11:28 7 178 degrees for an IPS panel or out to more like
11:28 8 160 degrees for a TN panel, correct?

11:28 9 A. I'm sorry. I don't know. I'm not a -- from a
11:28 10 panel manufacturer.

11:28 11 Q. Okay. Well, you have already agreed with me,
11:29 12 I think the most fundamental point, that the backlight
11:29 13 gets the light straight up to that liquid crystal
11:29 14 panel. You already agreed with that, right?

11:29 15 A. Yes.

11:29 16 Q. And so when your lawyer was acting like, well,
11:29 17 we don't want a backlight panel that doesn't give us
11:29 18 178 degrees, were you trying to make the jury think
11:29 19 that that came down to the backlight panel instead of
11:29 20 the IPS liquid crystal display panel?

11:29 21 A. I don't know whether that 178 degrees is
11:30 22 produced by the backlight module or the liquid crystal
11:30 23 panel.

11:30 24 Q. Okay. So you absolutely did not mean to give
11:30 25 the impression to this jury that it depended on the

11:30 1 backlight configuration, did you?

11:30 2 A. Right. I did not.

11:31 3 Q. And you understand, sir --

11:31 4 MR. CALDWELL: Thank you, Mr. Diaz.

5 BY MR. CALDWELL:

11:31 6 Q. You understand -- I know you had some what we
11:31 7 would call flat panel displays 15, 20 years ago. You
11:31 8 understand ASUS is 100 percent free to go back to the
11:31 9 kind of backlights they used back then.

11:31 10 You know that, right?

11:31 11 A. Could you please explain what you mean a
11:31 12 little bit more?

11:32 13 Q. I'll try to ask it differently.

11:32 14 Yesterday I asked if you had any plans to go
11:32 15 to something that would be not infringing, and your
11:32 16 answer was essentially that you can't address that
11:32 17 because these lights come from the vendors, right?

11:32 18 A. Because the black -- the backlight is designed
11:33 19 by the panel manufacturers.

11:33 20 Q. All right. Now, you testified earlier
11:33 21 something about how you think customers don't really
11:33 22 care about the backlight.

11:33 23 Do you remember giving that testimony?

11:33 24 A. What I said is that the consumer doesn't know
11:33 25 what the backlight is.

11:33 1 Q. And what you told us a year ago was you don't
11:33 2 know the reason why a consumer pays a premium for a
11:33 3 given product, correct?

11:34 4 A. Correct. I really don't know the reason.

11:34 5 Q. Okay. I'd like to talk a little bit about
11:34 6 these representative models that you showed. Okay?

11:34 7 A. Okay.

11:34 8 Q. You gave a lot of testimony saying you know
11:34 9 what? We don't really care to continue using quantum
11:34 10 dots or something along those lines, right?

11:34 11 A. What I said was that we are no longer
11:35 12 producing those five types of monitors, the five
11:35 13 accused monitors.

11:35 14 Q. Oh. Have you moved to other quantum dot
11:35 15 monitors now just as part of rolling out new models?

11:35 16 A. Well, we do have 1- or 200 monitors on the
11:35 17 market right now. So I don't know if there are any
11:35 18 others that use quantum dot.

11:35 19 Q. So you didn't mean to give the impression that
11:36 20 ASUS has stopped shipping quantum dot monitors, did
11:36 21 you?

11:36 22 A. What I said is that there are total of five
11:36 23 accused models that use quantum dot, and we're no
11:36 24 longer making those.

11:36 25 Q. I understand. And I -- I'm -- again, I really

11:36 1 don't mean any disrespect, but I think it's important
11:36 2 that you pay attention to my question. Okay?

11:36 3 A. Okay.

11:37 4 Q. Did you intend to give this jury the
11:37 5 impression that ASUS had stopped shipping quantum dot
11:37 6 monitors?

11:37 7 A. I did not mean that.

11:37 8 Q. Sir, and even as to the representative models
11:37 9 that are at issue in this case, how many of the
11:37 10 asserted patents or asserted patent claims even require
11:37 11 quantum dots?

11:37 12 A. I'm sorry. I'm not an engineer. I don't have
11:38 13 any way to determine that.

11:38 14 Q. Sir, some of the asserted patents don't even
11:38 15 require the use of quantum dots at all, correct?

11:38 16 A. Correct.

11:38 17 Q. What is the typical product life cycle of a
11:38 18 given gaming monitor?

11:38 19 A. There's no standard answer to that.

11:39 20 Q. I understand some may last longer than others.
11:39 21 I'm really not trying to ask something that's tricky.
11:39 22 Just -- I mean, does a monitor, is it typically on sale
11:39 23 for two years? five years? Is there kind of a rough
11:39 24 estimate?

11:40 25 CHECK INTERPRETER: The check interpreter

11:40 1 could clarify a little.

11:40 2 THE INTERPRETER: The interpreter would
11:40 3 like to clarify.

11:40 4 A. ASUS would continue its business as long as
11:41 5 there are orders for production of these models, and
11:41 6 there are 100 to 200 of them and unless we find that
11:41 7 the panel manufacturers are no longer making them.

11:41 8 CHECK INTERPRETER: The check interpreter
11:41 9 would like to clarify.

11:41 10 A. ASUS would continue the business as long as
11:41 11 there are orders unless the suppliers stopped supplying
11:41 12 certain parts. That is why there are 100 to 200
11:41 13 different models.

11:41 14 BY MR. CALDWELL:

11:41 15 Q. Okay. I'd like to ask something that maybe
11:41 16 falls a little bit within your M.B.A. background a tiny
11:41 17 bit.

11:41 18 MR. CALDWELL: May I have the document
11:41 19 camera?

11:42 20 A. Okay.

11:42 21 BY MR. CALDWELL:

11:42 22 Q. If ASUS could go to one of its suppliers and
11:42 23 buy a monitor for \$211 or buy the same one for \$190,
11:42 24 everything else being equal, which one would it pick?

11:42 25 A. We would choose to buy the cheaper one.

11:42 1 Q. If ASUS could go to its suppliers and buy a
11:43 2 monitor for \$211 or buy the same monitor for \$204, all
11:43 3 other things being equal, which one would it pick?

11:43 4 A. We would buy the less expensive one.

11:43 5 Q. If you can save \$7 on something that ASUS
11:43 6 sells millions of times, that's good business for ASUS,
11:44 7 correct?

11:44 8 A. Yes.

11:44 9 Q. Do you have an understanding of why your
11:44 10 lawyers keep bringing up Samsung? And I don't mean --
11:44 11 don't tell me what your lawyers told you. I mean, do
11:44 12 you understand how the Samsung thing fits into this
11:44 13 case?

11:44 14 A. Well, regardless of what the lawyers say,
11:45 15 Samsung is our largest competitor to -- is the largest
11:45 16 competitor to ASUS.

11:45 17 Q. But you understand they keep bringing it up
11:45 18 because Samsung -- I'm sorry -- ASUS' lawyers are
11:45 19 making this argument that they should -- ASUS should
11:45 20 get a license as cheap or cheaper than Samsung.

11:45 21 Are you aware of that?

11:45 22 A. I am not an expert in that particular area,
11:46 23 but we do have a damages expert who I think would be
11:46 24 more better placed to answer that.

11:46 25 Q. Okay. I'm going to -- I want to ask you

11:46 1 something that's kind of much more in your wheelhouse.

11:46 2 Okay? Your supply chain, okay?

11:46 3 A. Okay.

11:46 4 Q. You told me yesterday you were in regular
11:46 5 contact with six different panel supplier companies.
11:46 6 There may have been others, but at least six and you
11:46 7 named them.

11:46 8 Do you remember that?

11:46 9 A. Yes. I remember that.

11:47 10 Q. And one of them was SDC, right?

11:47 11 A. SDC is the panel division for Samsung.

11:47 12 Q. You know what I've never heard you say is that
11:47 13 Samsung's panel division is using Dr. Vasylyev's panels
11:47 14 in widespread use. You've never said that, have you?

11:47 15 A. Well, we have been in regular contact, but
11:48 16 they never mentioned that they were using SVVTI's
11:48 17 technology.

11:48 18 Q. And on that long list of products, the
11:48 19 stipulated products that are at issue in this case,
11:48 20 there's not a single one of them that's using a
11:48 21 backlight panel that came from Samsung, right?

11:48 22 A. As I just mentioned, there are more than 100
11:49 23 models, and there are many different types of panels.
11:49 24 So I can't remember all of them.

11:49 25 Q. Well, you can't remember any of them that have

11:49 1 a Samsung patent, correct?

11:49 2 I'm sorry. I misspoke. And I just want to
11:49 3 clarify before you translate. I'm sorry.

11:49 4 You can't remember any of them that include a
11:49 5 Samsung panel, correct?

11:49 6 A. I don't remember.

11:49 7 Q. Yet ASUS has other products that are not on
11:49 8 the list of stipulated products that use Samsung
11:49 9 panels, correct?

11:49 10 A. Could you repeat the question, please?

11:50 11 Q. ASUS makes other products that are not the
11:50 12 accused products in this case that use Samsung panels,
11:50 13 right?

11:50 14 A. For example, what? Are you referring to
11:50 15 laptop computers?

11:50 16 Q. Sir, you're the PM for displays. I'm asking,
11:50 17 are there other displays that are not accused in this
11:50 18 case where ASUS uses a Samsung panel?

11:51 19 A. Yes.

11:51 20 Q. Will you agree with me that it would be truly
11:51 21 ridiculous to suggest that every display Samsung makes
11:51 22 uses Dr. Vasylyev's backlight design?

11:51 23 A. I don't know.

11:52 24 MR. CALDWELL: Okay. I'll pass the
11:52 25 witness.

11:52 1 MS. MARRIOTT: No further questions,
11:52 2 Your Honor.

11:52 3 THE COURT: You may step down.

11:52 4 MR. CALDWELL: Your Honor, I will want to
11:52 5 sticker this as a demonstrative which we can take up at
11:52 6 the appropriate time.

11:52 7 THE COURT: Just to -- for me to figure
11:52 8 out what I'm going to do, who's your next witness?

11:52 9 MR. BURESH: Dr. Goossen, Your Honor.

11:52 10 THE COURT: How long will it take to
11:52 11 qualify him?

11:52 12 MR. BURESH: Ten to 15 minutes.

11:52 13 THE COURT: Why don't we go ahead --

11:52 14 Ladies and gentleman of the jury, what
11:52 15 I'd like to do is go ahead and have the defendant put
11:52 16 on their next witness, who's an expert, have them put
11:52 17 on what they need to qualify him, and then we can break
11:52 18 for lunch. Does that work for you?

11:52 19 Okay. Let's do that.

11:52 20 MR. BURESH: Your Honor, we call
11:52 21 Dr. Keith Goossen.

11:52 22 (The witness was sworn.)

11:52 23 DIRECT EXAMINATION

11:52 24 BY MR. BURESH:

11:53 25 Q. Good morning, Dr. Goossen.

11:53 1 A. Good morning.

11:53 2 Q. Go ahead and state your name for the jury and
11:53 3 for the record, please.

11:53 4 A. Hi. I'm Dr. Keith Goossen. I'm a professor
11:53 5 of engineering at the University of Delaware.

11:53 6 Q. And as we've all done, as we talk to the jury,
11:53 7 just go ahead and give your introduction.

11:53 8 A. Okay. I'll describe some things about me
11:53 9 personally. I grew up on a dairy farm in Central
11:54 10 California. It was hard work growing up, but I think
11:54 11 it put in me a strong work ethic and a lot of common
11:54 12 sense, and I'll try to apply that here.

11:54 13 Q. Just so we have the context, are you an ASUS
11:54 14 employee or affiliated with ASUS in any way?

11:54 15 A. I'm not.

11:54 16 Q. What is your role going to be in this case?

11:54 17 A. My role here is to analyze the patents and the
11:54 18 products and the infringement contentions and develop
11:54 19 opinions about them and present them as clearly as I
11:54 20 can to you, the jury.

11:54 21 Q. Okay. And did you work with me to prepare
11:54 22 some slides to help you with your testimony?

11:54 23 A. Yes. I did.

11:54 24 Q. And are these now on the screen in front of
11:54 25 you?

11:54 1 A. Yes.

11:54 2 Q. Okay. On the first of your slides, there are
11:54 3 education and work experience. I believe it's going
11:54 4 bottom to top. So walk the jury through your
11:55 5 educational experience, please.

11:55 6 A. I got my bachelor's degree in electrical
11:55 7 engineering at the University of California at
11:55 8 Santa Barbara. From there, much to the chagrin of my
11:55 9 mother, I went to the East Coast to get my Ph.D. at
11:55 10 Princeton, my master's and my Ph.D. My Ph.D. thesis
11:55 11 was in quantum mechanical optical detectors.

11:55 12 Q. Okay. That sounds like a big thing.
11:55 13 Can you kind of tell the jury what that's
11:55 14 about?

11:55 15 A. Well, it's kind of complicated, but I was
11:55 16 working on optical detectors that incorporate what are
11:55 17 called quantum wells, which are similar to the quantum
11:55 18 dots being discussed here.

11:55 19 Q. Okay. And go ahead and tell us about your
11:55 20 work experience after you secured your doctorate in
11:55 21 1988.

11:55 22 A. So from there I went on to Bell Laboratories
11:55 23 as a researcher in electro-optics, working in the field
11:56 24 of optics generally on a diverse arrange of subjects.

11:56 25 From Bell Laboratories in the year 2000, I

11:56 1 co-founded a company making a fiber-optic module. And
11:56 2 in 2002, I became a professor at the University of
11:56 3 Delaware, continuing to work in the field of optics the
11:56 4 whole time.

11:56 5 Q. Okay. Are you doing research now as well as
11:56 6 teaching?

11:56 7 A. Oh, yes. I have right now five ongoing active
11:56 8 grants, and it keeps me very busy. For this week I had
11:56 9 the students take a midterm on Tuesday so that I didn't
11:56 10 need to be there. The TA could proctor it.
11:56 11 Unfortunately, tomorrow I'll have to reschedule class.

11:56 12 Q. Okay. So you are currently a classroom
11:56 13 professor as well?

11:56 14 A. Oh, yes. Very much so.

11:56 15 Q. Do you like doing that?

11:56 16 A. Yes. I do.

11:56 17 Q. What do you like about it?

11:56 18 A. I like trying to convey clarity on a subject
11:57 19 to my students. I like seeing that they've gained an
11:57 20 understanding of what the subject matter is. It gives
11:57 21 me, you know, pleasure that they have understood
11:57 22 something and then can go on and utilize that knowledge
11:57 23 in their careers.

11:57 24 Q. Now, today you're doing some consulting work,
11:57 25 fair?

11:57 1 A. Yes. This comes under the heading of
11:57 2 consulting.

11:57 3 Q. Okay. So you are being compensated for the
11:57 4 time you're spending?

11:57 5 A. Yes. I'm being paid.

11:57 6 Q. And what's your consulting rate that you do
11:57 7 for this type of consulting?

11:57 8 A. I'm being paid \$350 an hour.

11:57 9 Q. How did you come up with that rate?

11:57 10 A. Well, so doing this work, expert witnessing, I
11:57 11 think you've kind of observed there's very high
11:58 12 compensations involved usually. And so \$350 was the
11:58 13 lowest number I could think of that I felt would not be
11:58 14 odd in the field of expert witnessing.

11:58 15 Q. Do you do this expert consulting to pay the
11:58 16 bills, put food on the table, so to speak?

11:58 17 A. No. It's a small fraction of my income.

11:58 18 Q. Does your compensation in this particular case
11:58 19 depend in any way on the outcome, whatever the jury
11:58 20 decides?

11:58 21 A. It does not.

11:58 22 Q. So looking at your experience and your
11:58 23 education, all told, how long have you been working,
11:58 24 studying, researching in the field of optics?

11:58 25 A. About 35 years.

11:58 1 Q. During that 35 years of work in this field,
11:58 2 did you have the opportunity to be an inventor?

11:59 3 A. Oh, yes. I have, as it says here, over 80
11:59 4 patents.

11:59 5 Q. Are some of those related to optics and the
11:59 6 types of things we're talking about here?

11:59 7 A. Most of them are in the field of optics.

11:59 8 Q. There's been a fair amount of discussion in
11:59 9 this case about the person of ordinary skill in the
11:59 10 art, so I won't bore the jury with that again. But
11:59 11 you've listed the qualifications for that person of
11:59 12 ordinary skill on Slide 3 of your presentation,
11:59 13 correct?

11:59 14 A. Yes.

11:59 15 Q. And were you a person, at least a person of
11:59 16 ordinary skill by 2009 when the first of the patents in
11:59 17 this case were filed?

11:59 18 A. Yes. I was.

11:59 19 Q. Now, you've conducted an analysis, as you've
12:00 20 told the jury about already.

12:00 21 Can you describe for the jury the types of
12:00 22 information that you considered as you prepared,
12:00 23 developed your opinions?

12:00 24 A. Yes. I accessed all the information that's
12:00 25 listed here. I'll walk through it. Of course the

12:00 1 patents that are being asserted. Their file histories
12:00 2 is a record of how they came to be. My knowledge,
12:00 3 experience, and qualifications in the field of optics.

12:00 4 I examined SVV's teardown, meaning the -- what
12:00 5 they did to take apart the products in their analysis.
12:00 6 Dr. Credelle's report, his analysis. I did my own
12:00 7 product teardowns or taking apart the monitors and
12:00 8 examining what was inside, including using microscopic
12:01 9 analysis.

12:01 10 I examined the legal complaint, the
12:01 11 infringement contentions, and the Court constructions,
12:01 12 meaning how they said certain claim terms had to be
12:01 13 understood, and various depositions by other witnesses
12:01 14 in the case.

12:01 15 Q. Okay. And having reviewed that information,
12:01 16 did you conduct an analysis in a comparison between the
12:01 17 patents and the accused products in this case?

12:01 18 A. Yes. I have.

12:01 19 Q. And did you conduct that from the perspective
12:01 20 of a person of ordinary skill in the art?

12:01 21 A. Yes. I have.

12:01 22 MR. BURESH: Your Honor, defendant offers
12:01 23 Dr. Goossen as an expert witness in the field of optics
12:01 24 for this case.

12:01 25 MR. MCCARTY: No objection.

12:01 1 THE COURT: He'll be admitted as such.

12:01 2 Ladies and gentleman of the jury, we'll

12:01 3 take our lunch recess. If you'd be back by 1:30, we'll

12:01 4 get started at that time.

12:01 5 THE BAILIFF: All rise.

12:02 6 (Jury exited the courtroom.)

12:02 7 THE COURT: You may be seated.

12:02 8 Doctor, you may step down.

12:02 9 Okay. Those of you who are going to work

12:02 10 on the jury charge with me are welcome to come back to

12:02 11 the chambers. Those of you who are not are welcome to

12:02 12 go do whatever it is y'all do at lunch. As I said

12:02 13 before, everyone's welcome. No one required. So if

12:02 14 y'all give me five minutes to get ready, come on back,

12:02 15 we'll see you there.

12:02 16 THE BAILIFF: All rise.

12:02 17 (Recess taken.)

01:34 18 THE BAILIFF: All rise.

01:34 19 THE COURT: Please remain standing for

01:34 20 the jury.

01:34 21 (Jury entered the courtroom.)

01:34 22 THE COURT: Thank you. You may be

01:34 23 seated.

01:34 24 Yes, sir.

01:34 25 MR. BURESH: Go ahead and pull up the

01:34 1 slides, please. Thank you.

01:34 2 BY MR. BURESH:

01:34 3 Q. All right. Welcome back, Dr. Goossen.

01:34 4 A. Thank you.

01:34 5 Q. I want to get right into the patents now, if
01:34 6 that's okay with you.

01:34 7 A. Yes.

01:35 8 Q. Now, you broke these patents up into two
01:35 9 groups that you gave to me, correct?

01:35 10 A. Correct.

01:35 11 Q. Describe to the jury why you broke these up
01:35 12 into two groups that we see on Slide 5.

01:35 13 A. Yes. So the patents that we've been referring
01:35 14 to by their last three digits, the '318 and the
01:35 15 '089 patent, I've grouped into a category that I've
01:35 16 labeled the light-trapping patents because that's
01:35 17 primarily what they're concerned with. And the '342
01:35 18 and the '562 patents, I've categorized in the
01:35 19 light-collimating group since that's what they're
01:35 20 primarily concerned with.

01:35 21 Q. Okay. I'd like to talk about the
01:35 22 light-trapping group first. And just at a high level,
01:35 23 Dr. Goossen, what is the main focus of the
01:35 24 light-trapping patents?

01:35 25 A. So "light trapping" is a term of art in the

01:35 1 solar energy field. It refers to that solar cells, if
01:36 2 they're just flat surfaces, the light comes straight
01:36 3 down and will go through and bounce right back out.

01:36 4 So very early on, I mean, decades ago in the
01:36 5 solar energy technology field, they developed
01:36 6 techniques for what they call light trapping, which
01:36 7 basically means -- and it's usually performed in and
01:36 8 it's described in the background of the patent, as
01:36 9 texturing the surface of the solar cell so that when
01:36 10 the light comes in, it's deflected sideways.

01:36 11 And so light trapping refers to that sideways
01:36 12 deflection in the solar cell, so it travels sideways a
01:36 13 longer distance and so it gets absorbed and completely
01:36 14 extinguished and trapped.

01:36 15 Q. And at a high level, just by way of preview,
01:36 16 how did you find that the light-trapping patents
01:36 17 compared to the accused products in this case?

01:36 18 A. As described, they're completely different.
01:36 19 The light-trapping patents are as described, referring
01:36 20 to solar cells or solar panels, whereas the products
01:37 21 are --

01:37 22 MR. MCCARTY: Objection, Your Honor.

23 (Clarification by Reporter.)

01:37 24 MR. MCCARTY: Objection, Your Honor.

01:37 25 He's violating the order of MIL No. 18, comparing the

01:37 1 products to the specification.

01:37 2 MR. BURESH: I'll withdraw the question,
01:37 3 Your Honor, and move on.

01:37 4 BY MR. BURESH:

01:37 5 Q. Dr. Goossen, what kind of display examples are
01:37 6 provided in the light-trapping patents?

01:37 7 A. None.

01:37 8 Q. Do the light-trapping patents contemplate any
01:37 9 device that even emits light out?

01:37 10 A. They do not.

01:37 11 Q. Okay. You've mentioned solar panels.

01:37 12 MR. BURESH: If we could go to the next
01:37 13 slide.

14 BY MR. BURESH:

01:37 15 Q. What is an example of a solar panel that the
01:37 16 jury may be familiar with?

01:37 17 A. Solar panels like you see on someone's roof.

01:37 18 Q. And I assume light is not coming out of solar
01:37 19 panels. Why would that be?

01:37 20 A. Well, you want to take in all the sunlight and
01:37 21 trap it all inside the solar cell and absorb it all and
01:37 22 convert it all into electricity to maximize the
01:37 23 efficiency.

01:37 24 Q. Okay. Let me ask you this: We've heard
01:38 25 Dr. Credelle refer to a light guide in the accused

01:38 1 products as a light-trapping system.

01:38 2 Do you recall that?

01:38 3 A. Yes.

01:38 4 Q. Have you ever heard anybody in the field other
01:38 5 than Dr. Credelle in the context -- or Mr. Credelle in
01:38 6 the context of this case describe a light guide as a
01:38 7 light-trapping system?

01:38 8 A. I've never heard the light trapping term ever
01:38 9 used outside of the solar community.

01:38 10 Q. On Slide No. 8, we have the cover page of the
01:38 11 '318 patent; is that correct?

01:38 12 A. Correct.

01:38 13 Q. And could you explain from your perspective
01:38 14 why, before we get to the claims of the patent, is it
01:38 15 appropriate to look and consider the context of the
01:38 16 patents?

01:38 17 A. So I determined in the process of this whole
01:38 18 process of being an expert witness that I'm in fact
01:39 19 required to examine the full patent, including the
01:39 20 description, before I try to understand the claims.

01:39 21 Q. Okay. In the context of the '318 patent,
01:39 22 looking again at the cover page, what is light trapping
01:39 23 in the context of the '318 patent?

01:39 24 A. It's the same as I described for solar panels.
01:39 25 The inventor here is endeavoring to produce an improved

01:39 1 form of light trapping or making sure all the light
01:39 2 gets into and fully absorbed by the solar cell.

01:39 3 Q. Was there a figure in the '318 patent, as an
01:39 4 example, that would help the jury understand this
01:39 5 light-trapping concept?

01:39 6 A. Yeah, there's a figure, No. 18, I think.

01:39 7 Q. Okay. In the context of Figure 18,
01:39 8 Dr. Goossen, this is from the '318 patent, correct?

01:40 9 A. Correct.

01:40 10 Q. Okay. Describe for us how the light flow
01:40 11 works in the context of this example in the
01:40 12 '318 patent.

01:40 13 A. So the light flow is indicated by the fine
01:40 14 black lines in the figure showing light coming from the
01:40 15 top as if from the sun and coming straight down onto
01:40 16 the device. The device has a set of lenses. Each lens
01:40 17 is coordinated with a deflecting element shown here.

01:40 18 And so the concept being shown here is that
01:40 19 the sunlight is focused on the deflecting elements that
01:40 20 then cause the light to go sideways, as I said, in the
01:40 21 light-harvesting device or solar cell, which is
01:40 22 indicated by the green layer.

01:40 23 Q. Okay. So just breaking that down a little
01:41 24 bit -- and feel free to annotate with your finger if
01:41 25 it's helpful.

01:41 1 Where is the light coming from in this
01:41 2 example?

01:41 3 A. It's coming from above.

01:41 4 Q. And where does the light end up?

01:41 5 A. It ends up in the light-harvesting device,
01:41 6 which is layer 4.

01:41 7 Q. And what happens in that light-harvesting
01:41 8 layer 4?

01:41 9 A. The light gets fully extinguished, so it's
01:41 10 trapped in the solar cell.

01:41 11 Q. Let me try it this way.

01:41 12 Where does the light exit this device that's
01:41 13 depicted in Figure 18?

01:41 14 A. It's not designed to have any light exit.

01:41 15 MR. BURESH: If we go to the next slide.

01:41 16 BY MR. BURESH:

01:41 17 Q. I'd like to get into a little bit of
01:41 18 terminology.

01:41 19 Now, layer 8 is the layer that the light is
01:41 20 passing through on its way to the harvesting layer,
01:42 21 correct?

01:42 22 A. Correct.

01:42 23 Q. Okay. Which surface in Figure 18 is the light
01:42 24 input surface?

01:42 25 A. The input surface to the layer 8 is

01:42 1 surface 12.

01:42 2 Q. And why is surface 12 the light input surface?

01:42 3 A. Because based upon the prevailing direction of
01:42 4 light which is from top to bottom, that's where it
01:42 5 enters the layer.

01:42 6 Q. Where is the light output surface of layer 8?

01:42 7 A. It's surface 10.

01:42 8 Q. Okay. And why is that the light output
01:42 9 surface?

01:42 10 A. Because based on the prevailing direction of
01:42 11 light, that's where light exits the layer 8.

01:42 12 Q. Okay. So, Dr. Goossen, what is the simple way
01:42 13 of identifying the appropriate layers in a system like
01:42 14 this?

01:42 15 A. Well, in terms of surfaces, the light input
01:43 16 surface is where the light goes in and the light output
01:43 17 surface of where the light goes out.

01:43 18 Q. Okay. Now, if you expand this out past
01:43 19 Figure 18 -- and I want to consider all the examples
01:43 20 that are provided in the specification of the
01:43 21 '318 patent -- is there any example where there are
01:43 22 multiple light input surfaces in the same system?

01:43 23 A. No. There are not.

01:43 24 Q. Are there any examples provided in the
01:43 25 '318 patent where there are multiple light output

01:43 1 surfaces?

01:43 2 A. No. There are not.

01:43 3 Q. Okay. This is Slide 11. What are we seeing
01:43 4 on the left?

01:43 5 A. You're seeing the lead claim for the patent.

01:43 6 Q. Okay. Claim 1?

01:43 7 A. Yes.

01:43 8 Q. And looking at the highlighted limitation, the
01:43 9 first limitation -- and by "limitation," we're just
01:44 10 talking about the first paragraph, correct?

01:44 11 A. Correct.

01:44 12 Q. Okay. Looking at the first limitation, could
01:44 13 you help the jury orient this claim to the example in
01:44 14 Figure 18 that we've been talking about?

01:44 15 A. Yes. So the highlighted limitation states how
01:44 16 the geometry of the invention has to work. And so it
01:44 17 describes the layer of optically transparent material
01:44 18 which in Figure 18 is layer 8. It describes a
01:44 19 broad-area light input surface which in the figure is
01:44 20 surface 12. And a opposing broad-area light output
01:44 21 surface which in the figure is surface 10, and those
01:44 22 two surfaces have to be parallel to each other.

01:44 23 Q. Okay. And again, to break this down,
01:44 24 highlighted in orange we have the broad-area light
01:44 25 input surface. Where is that in Figure 18?

01:44 1 A. It's surface 12.

01:45 2 Q. And where is the broad-area light output
01:45 3 surface?

01:45 4 A. It's surface 10.

01:45 5 Q. The claim requires those surfaces to be
01:45 6 opposing, correct?

01:45 7 A. Correct.

01:45 8 Q. In what way are those two surfaces opposing?

01:45 9 A. Well, they're facing each other.

01:45 10 Q. The claim requires those two surfaces to be
01:45 11 generally parallel, correct?

01:45 12 A. Yes.

01:45 13 Q. How are those two surfaces generally parallel?

01:45 14 A. Well, they're in the same direction like train
01:45 15 tracks are parallel.

01:45 16 Q. Now, the claim also requires these surfaces to
01:45 17 be, quote, broad area.

01:45 18 Do you see that?

01:45 19 A. Yes.

01:45 20 Q. What does that mean?

01:45 21 A. Well, so in the figure, layer 8 is shown in
01:45 22 cross section. And generally, it would extend, you
01:45 23 know, much wider and also into the page. And so it's a
01:45 24 sheet of material having large areas in the top and the
01:46 25 bottom, and so because those large areas are larger

01:46 1 than the edges, they're the broad-area surfaces.

01:46 2 Q. Okay. So picking one, for example, 12, the
01:46 3 input surface, just so we're all clear, why is that a
01:46 4 broad-area surface?

01:46 5 A. It's characterized as broad area because it's
01:46 6 a large area surface.

01:46 7 Q. Okay. Slide 12, we still have Claim 1 of the
01:46 8 '318 patent on the left, correct?

01:46 9 A. Correct.

01:46 10 Q. And what are we seeing on the right?

01:46 11 A. A drawing of the accused device.

01:46 12 Q. The light guide of the accused device?

01:46 13 A. Yes. The light guide plate.

01:46 14 Q. What kind of display is the representative
01:46 15 accused product for this '318 patent?

01:46 16 A. It's what's called an edge-lit display.

01:47 17 Q. And what does "edge-lit display" mean?

01:47 18 A. It means the light comes in on the edge.

01:47 19 Q. How is that being depicted in this drawing?

01:47 20 A. You can see the set of LEDs here. They supply
01:47 21 the light for the system, and it goes in on this edge
01:47 22 here.

01:47 23 Q. Okay. And what is the prevailing flow of
01:47 24 light in this light guide for the representative
01:47 25 product?

01:47 1 A. It's coming in through the edge and going out
01:47 2 through the top.

01:47 3 Q. Okay. And I see you've depicted the light
01:47 4 coming out from the top as sort of a cloud of light.
01:47 5 Is that fair to say?

01:47 6 A. Yes. That's fair.

01:47 7 Q. Why are you depicting it that way?

01:47 8 A. Well, the design of a light guide plate is
01:47 9 such that you want to have uniform output off the top
01:47 10 and -- which means that you want the same light
01:47 11 intensity at any point along the top. But also, at any
01:47 12 point along the top, you want the light coming out in
01:47 13 all directions.

01:48 14 Q. Okay. Dr. Goossen, does the edge-lit
01:48 15 representative product satisfy the first limitation of
01:48 16 Claim 1?

01:48 17 A. It does not.

01:48 18 Q. Why not?

01:48 19 A. For three reasons: The input surface is the
01:48 20 edge, as I've said. And it is not broad area because
01:48 21 it's the edge. It is not opposing the output surface,
01:48 22 which is the top, because they're not facing each
01:48 23 other. And it's not parallel to the opposite surface.
01:48 24 In fact, it's the opposite. It's perpendicular.

01:48 25 Q. Okay. I'm going to clear these annotations,

01:48 1 and you can start over again, if necessary, or as you
01:48 2 see fit.

01:48 3 In the accused representative product, where
01:48 4 is light being put in?

01:48 5 A. On the edge.

01:48 6 Q. Okay. Is the edge of a light guide a
01:48 7 broad-area surface?

01:48 8 A. It is not.

01:48 9 Q. Where does the light go out of the light
01:49 10 guide?

01:49 11 A. Through the top.

01:49 12 Q. Okay. Now, is the edge where the light is
01:49 13 being put in an opposing surface to the top, where the
01:49 14 light is going out?

01:49 15 A. It is not.

01:49 16 Q. Is the edge where the light is being put in
01:49 17 generally parallel to the top surface where the light
01:49 18 is coming out?

01:49 19 A. It is not.

01:49 20 MR. BURESH: Could you pull up for me
01:49 21 Mr. Credelle's slide at PDX-3.98?

22 Thank you.

23 BY MR. BURESH:

01:49 24 Q. Were you here during Mr. Credelle's testimony?

01:49 25 A. Yes. I was.

01:49 1 Q. And do you recall seeing this slide during his
01:49 2 testimony, describing the same limitation of Claim 1 of
01:49 3 the '318 patent?

01:49 4 A. I do.

01:49 5 Q. First, just to get ourselves oriented, we're
01:50 6 looking at an edge-lit display, correct?

01:50 7 A. Correct.

01:50 8 Q. Where the light is coming in there?

01:50 9 A. Yes.

01:50 10 Q. But Dr. -- excuse me.

01:50 11 Mr. Credelle did not call that edge the light
01:50 12 input surface, correct?

01:50 13 A. He did not.

01:50 14 Q. Instead, he pointed to this bottom surface as
01:50 15 being the light input surface, correct?

01:50 16 A. Correct.

01:50 17 Q. What do you think about that opinion from
01:50 18 Mr. Credelle?

01:50 19 A. I disagree with it. No optical engineer or
01:50 20 physicist would ever call some surface within a
01:50 21 multiple-layered system where light is simply bouncing
01:50 22 around the input surface. The input surface is where
01:50 23 light comes in.

01:50 24 Q. What is the easiest way to determine the input
01:50 25 and output surface?

01:50 1 A. Based on the prevailing flow of light through
01:50 2 the system.

01:50 3 Q. And what is the prevailing flow of light in
01:51 4 the representative accused product light guide?

01:51 5 A. It goes in through the edge and out through
01:51 6 the top.

01:51 7 Q. In light of that --

01:51 8 MR. BURESH: Can we go back to my slides?

01:51 9 BY MR. BURESH:

01:51 10 Q. In light of your analysis and the things
01:51 11 you've outlined to the jury here today, what is your
01:51 12 opinion with respect to whether the accused
01:51 13 representative product meets the first limitation of
01:51 14 Claim 1 of the '318 patent?

01:51 15 A. My opinion is the products do not meet the
01:51 16 limitation.

01:51 17 Q. What does that mean for infringement?

01:51 18 A. The products do not infringe the claim.

01:51 19 Q. Now, Dr. Goossen, Claim 3 of the '318 patent
01:51 20 is asserted?

01:52 21 A. Yes.

01:52 22 Q. Can you explain to the jury your opinion on
01:52 23 Claim 3?

01:52 24 A. Claim 3 is what's called a dependent claim.
01:52 25 So it is not infringed if Claim 1 is not infringed.

01:52 1 And so since Claim 1 is not infringed, neither is
01:52 2 Claim 3.

01:52 3 Q. All right. One down. If we could go to the
01:52 4 next patent now, Dr. Goossen, the '089 patent.

01:52 5 Again, I'd like to start with the cover page
01:52 6 and just ask, what is the context for the '089 patent?

01:52 7 A. Again, the inventor is trying to prove --
01:52 8 improve upon light-trapping and light-harvesting
01:52 9 devices, which particularly are solar cells, by having
01:53 10 this optical system of his.

01:53 11 Q. And was there a figure in the '089 patent that
01:53 12 you found helpful in understanding this context?

01:53 13 A. Yes. Figure 11.

01:53 14 Q. Okay. And again, like we did with the '318,
01:53 15 could you describe for the jury how the light flow
01:53 16 works in the example provided in the '089 patent?

01:53 17 A. Yes. The -- as shown here by ray 122, for
01:53 18 example, the light comes from the top, as in sunlight.
01:53 19 And the concept being shown here is to, again, use a
01:53 20 combination of a lens here and a deflecting element
01:53 21 here in order to turn the light sideways into here,
01:53 22 where he's essentially combined the light-guiding layer
01:53 23 and the light-harvesting layer.

01:53 24 Q. Okay. And what is happening in the
01:53 25 light-harvesting layer labeled 4 highlighted in green?

01:54 1 A. It's being converted into electricity, which
01:54 2 is what is meant by these little depictions here.

01:54 3 Q. Okay. Where is the light designed to exit
01:54 4 this device we're looking at?

01:54 5 A. It is not designed to exit.

01:54 6 Q. Is this similar to the '318 patent in that
01:54 7 regard?

01:54 8 A. Very similar.

01:54 9 Q. Now, you mentioned light harvesting and
01:54 10 turning the light into electricity.

01:54 11 What does the '089 patent provide as at least
01:54 12 one example for how to convert light to electricity?

01:54 13 A. It discusses converting -- using photovoltaic
01:54 14 layers to convert light into electricity.

01:54 15 Q. And what is one example of photovoltaic
01:54 16 material mentioned in the '089 patent?

01:54 17 A. Well, he includes quantum dots as an example
01:54 18 of the photovoltaic material.

01:54 19 Q. Okay. Now, before we talk about quantum dots
01:54 20 a little bit more, do any of the other three patents
01:55 21 mention quantum dots?

01:55 22 A. They do not.

01:55 23 Q. Okay. So it's just this one patent where it's
01:55 24 talked about?

01:55 25 A. Correct.

01:55 1 Q. Okay. Now, we've heard a lot about changing
01:55 2 the color of light using quantum dots.

01:55 3 A. Yes. I've heard that.

01:55 4 Q. Are there different types of quantum dots?

01:55 5 A. Quantum dots would be designed differently
01:55 6 depending on their application.

01:55 7 Q. Specifically, Dr. Goossen, what are two
01:55 8 different designs or types of quantum dots that can be
01:55 9 contemplated?

01:55 10 A. As indicated here, quantum dots can be
01:55 11 designed to convert light into electricity, as
01:55 12 described in the '089 patent, or they can be designed
01:55 13 to change the color of light.

01:55 14 Q. Which type of quantum dots does the '089
01:55 15 patent discuss?

01:55 16 A. The kind of converting light into electricity.

01:55 17 Q. Why does that make sense in the context of the
01:55 18 '089?

01:55 19 A. Because it's concerned with solar energy.

01:55 20 Q. And converting solar energy to what?

01:56 21 A. To electricity.

01:56 22 Q. Where does the '089 patent discuss using
01:56 23 quantum dots to change the color of light?

01:56 24 A. It does not discuss using quantum dots to
01:56 25 change the color of light in any way.

01:56 1 Q. Why does it make sense that it wouldn't
01:56 2 discuss -- the '089 patent would not discuss changing
01:56 3 the color of light?

01:56 4 A. Because he's primarily concerned with
01:56 5 photovoltaic applications of quantum dots.

01:56 6 Q. And just to be clear, which type of quantum
01:56 7 dots have the plaintiffs been showing to the jury?

01:56 8 A. Well, what they've been showing is these
01:56 9 quantum dots in a jar, which are not what is in a solar
01:56 10 cell.

01:56 11 Q. So the plaintiff has been talking about the
01:56 12 wrong type of quantum dots from the very beginning of
01:56 13 this case?

01:56 14 A. Correct.

01:56 15 Q. I want to do a similar exercise as we did with
01:56 16 the last patent here.

01:56 17 So starting out, could you correlate for the
01:57 18 jury the highlighted limitation of Claim 14 of the '089
01:57 19 patent with Figure 11?

01:57 20 A. Yes. So the highlighted -- the clause here or
01:57 21 element of the claim first has a two-dimensional array
01:57 22 of optical elements. That's the lenses indicated in
01:57 23 purple.

01:57 24 They're distributed over the photoresponsive
01:57 25 layer, which is the layer in green, like a solar cell

01:57 1 layer. And they're configured for injecting light into
01:57 2 that layer, which you can understand based upon the ray
01:57 3 here coming down and the lens injecting a light into
01:57 4 the layer 4.

01:57 5 And particularly, they're injecting light into
01:57 6 a space defined between the optically transmissive and
01:57 7 reflective surfaces.

01:57 8 Now, the optically transmissive surface is
01:57 9 defined earlier in the claim as the one comprising the
01:58 10 light-deflecting elements 14, so that's why the
01:58 11 optically transmissive surface is this layer here. Or
01:58 12 this surface here. And the reflective surface is just
01:58 13 indicated by the reflector down here.

01:58 14 Q. Well, that was a chunk.

01:58 15 A. I know.

01:58 16 Q. So let's break this down just a little bit.

01:58 17 A. Sorry.

01:58 18 Q. So start out, what is the array of optical
01:58 19 elements that's in the first line of the highlighted
01:58 20 limitation?

01:58 21 A. It's the lenses indicated in purple.

01:58 22 Q. So we're talking about 10?

01:58 23 A. Yes.

01:58 24 Q. Okay. And what is the photoresponsive layer
01:58 25 in the example of Figure 11?

01:58 1 A. It's layer 4.

01:58 2 Q. Okay. And in what way is -- are the lenses
01:58 3 over the area of the photoresponsive layer?

01:58 4 A. They're over them in the diagram and also so
01:59 5 that they can inject light into the space.

01:59 6 Q. What do you mean by that?

01:59 7 A. Well, generally you can see the idea is that
01:59 8 the lenses focus the light into the space.

01:59 9 Q. By kind of aiming the light downwards?

01:59 10 A. Yes.

01:59 11 Q. Onto the deflecting elements?

01:59 12 A. Yes.

01:59 13 Q. Okay. Now that we're oriented, let me -- all
01:59 14 right. Same claim limitation. What are we looking at
01:59 15 on the right-hand side of Slide 22?

01:59 16 A. It's a depiction of the accused product,
01:59 17 including these sheets that are above the light guide
01:59 18 plate.

01:59 19 Q. Okay. And just to walk through these, we
01:59 20 talked about a light guide. Where's that in this
01:59 21 figure?

01:59 22 A. That is the light guide plate which is
02:00 23 indicated here.

02:00 24 Q. With LGP?

02:00 25 A. Yes. Light guide plate.

02:00 1 Q. And below the light guide plate, there's a
02:00 2 reflector?

02:00 3 A. Yes.

02:00 4 Q. What is above the light guide plate in the
02:00 5 accused products?

02:00 6 A. Well, in some accused products, there's the
02:00 7 quantum dot film called the "quantum dot enhancement
02:00 8 film."

02:00 9 Q. Okay.

02:00 10 A. And then in some products also, there's a
02:00 11 prism stack, sometimes called the "optical film stack."

02:00 12 Q. Okay. And there are some lenses in the
02:00 13 accused product. Where are those?

02:00 14 A. Those are in the top surface of the light
02:00 15 guide plate.

02:00 16 Q. Now, are the lenses, the optical elements, are
02:00 17 they over the photoresponsive layer which Mr. Credelle
02:00 18 has said is the requested film?

02:00 19 A. No. They are under it.

02:01 20 Q. So is this claim limitation satisfied?

02:01 21 A. It is not.

02:01 22 Q. Now, I can imagine someone might ask over,
02:01 23 under, you know, kind of flip the pancake over, who
02:01 24 cares? Why does that matter?

02:01 25 A. Well, first of all, the claim is like a

02:01 1 blueprint, and so all blueprints have an agreed-upon
02:01 2 coordinate system.

02:01 3 And numerous times in Mr. Credelle's report,
02:01 4 he agrees with me the standard understanding of what
02:01 5 "over" and "under" means because he's used the terms in
02:01 6 that way. So you can't just flip -- I mean, imagine
02:01 7 you're making a building and all of a sudden you flip
02:01 8 the blueprint over. You can't just do that.

02:01 9 Now, optically you can't do it because if you
02:01 10 try to just sort of flip over everything to try and
02:01 11 make under/over or something like that, the lenses
02:01 12 would be in the wrong configuration and wouldn't do
02:01 13 what they were designed to do.

02:02 14 Q. What are the lenses designed to do?

02:02 15 A. They're designed to inject light into the
02:02 16 photoresponsive space.

02:02 17 Q. And how do you know that?

02:02 18 A. Because that's what the patent says, the claim
02:02 19 says.

02:02 20 Q. Okay. If you flip the lenses over so the
02:02 21 light's going in the wrong direction, what happens?

02:02 22 A. Well, they're doing something different.
02:02 23 They're not injecting the light anymore. They're doing
02:02 24 something different.

02:02 25 MR. BURESH: Okay. Could you pull up for

02:02 1 me Mr. Credelle's slide at PDX-3.92?

02:02 2 BY MR. BURESH:

02:02 3 Q. Again, you heard Mr. Credelle's testimony?

02:02 4 A. Yes.

02:02 5 Q. Do you recall his discussion of this same
02:02 6 claim limitation at PDX-3.92 which is on the screen in
02:02 7 front of you?

02:02 8 A. Yes.

02:02 9 Q. Okay. Now, during my cross-examination of
02:03 10 Dr. Credelle, we looked at how -- I keep saying
02:03 11 "Doctor." I'm sorry. It's Mr. Credelle.

02:03 12 When you have -- every other patent, the
02:03 13 deflecting elements that he's pointing to are in the
02:03 14 light guide, correct?

02:03 15 A. Correct.

02:03 16 Q. But where are the deflecting elements that
02:03 17 Mr. Credelle pointed to for this particular patent?

02:03 18 A. So in order to try and map the claim onto the
02:03 19 product, because of the geometric requirements of the
02:03 20 claim, he had to identify the optical film stack as the
02:03 21 optically transmissive surface containing the
02:03 22 deflecting elements.

02:03 23 Q. And where is that in this figure?

02:03 24 A. It's over here.

02:03 25 Q. Okay. Now, where does he point to for the

02:03 1 reflective surface?

02:03 2 A. The reflector.

02:03 3 Q. So now, the claim talks about the space
02:03 4 between those two.

02:03 5 Do you see that?

02:03 6 A. Yes.

02:03 7 Q. So what is the space that Mr. Credelle has
02:04 8 defined?

02:04 9 A. All the way from here to here.

02:04 10 Q. And where are the lenses in -- relative to
02:04 11 that space?

02:04 12 A. Well, he's identified them here on the surface
02:04 13 of the light guide plate.

02:04 14 Q. And my question for you is, just to help me
02:04 15 understand: How are lenses that are inside of the
02:04 16 space that Mr. Credelle has defined supposed to inject
02:04 17 light into that space?

02:04 18 A. It doesn't make any sense. I mean, because
02:04 19 the light's already in the space, the lenses can't
02:04 20 inject light into the space. It's already there.

02:04 21 Q. What injects light into the space that
02:04 22 Mr. Credelle has defined?

02:04 23 A. The LED.

02:04 24 Q. Is the light in the space before it ever
02:04 25 touches the lenses?

02:04 1 A. Correct.

02:05 2 MR. BURESH: Back to -- thank you.

02:05 3 BY MR. BURESH:

02:05 4 Q. Dr. Goossen, in light of your analysis and the
02:05 5 summaries you've provided to the jury here today, what
02:05 6 is your conclusion with respect to Claim 14 of the
02:05 7 '089 patent as it compares to the representative
02:05 8 accused product?

02:05 9 A. The accused product does not meet the claim
02:05 10 requirements.

02:05 11 Q. And what does that mean in terms of the
02:05 12 question of infringement?

02:05 13 A. The products do not infringe the claim.

02:05 14 Q. Once again we have a dependent claim at issue
02:05 15 in this case, Claim 19. Explain to the jury again how
02:05 16 your analysis that you've just walked through applies
02:05 17 to this claim.

02:05 18 A. As you can see, dependent claims always begin
02:05 19 with "as recited by" or -- and here Claim 14. It means
02:05 20 that Claim 19 only applies if Claim 14 applies. And so
02:06 21 since Claim 14 is not met, Claim 19 is not infringed.

02:06 22 Q. Thank you.

02:06 23 All right. That completes both of the
02:06 24 light-trapping patents.

02:06 25 Is that fair to say, Dr. Goossen?

02:06 1 A. Yes.

02:06 2 Q. I'd like to move on now to the next group, the
02:06 3 light-collimating patents. And if you don't mind, just
02:06 4 start out at a high level by describing what the
02:06 5 light-collimating patents are about.

02:06 6 A. The light-collimating patents first describe
02:06 7 solar cell-type applications, and then they reverse the
02:06 8 flow of light so that they become illuminators. And
02:07 9 since the design is reverse of sunlight coming in, the
02:07 10 output is collimated light going out.

02:07 11 Q. And I believe these two patents are related;
02:07 12 the '342 is a continuation of the '562?

02:07 13 A. Correct.

02:07 14 Q. What does that mean?

02:07 15 A. They have exactly the same description.

02:07 16 Q. In terms of the written description and
02:07 17 figures?

02:07 18 A. Yes.

02:07 19 Q. Okay. Thank you.

02:07 20 Light collimating, Dr. Goossen, please explain
02:07 21 that to the jury, how it works.

02:07 22 A. Light collimating or collimated light is a
02:07 23 basic optical concept. It means that the light is
02:07 24 caused to become in parallel rays to each other, as
02:07 25 shown here.

02:07 1 So, for example, if you have a lens taking
02:07 2 light from a point here, those rays emanating in these
02:07 3 directions, the -- by laws of refraction, they would be
02:08 4 refracted so that they are all perfectly parallel to
02:08 5 each other.

02:08 6 Q. And how do the focal point in the lens work
02:08 7 together to create this collimation?

02:08 8 A. Light emitting from the focal point of a lens
02:08 9 will be perfectly collimated.

02:08 10 Q. Is the focal point in the middle of the lens?

02:08 11 A. Yes.

02:08 12 Q. Starting with the '342 patent, Dr. Goossen, in
02:08 13 looking at the cover page, what is the focus of this
02:08 14 patent?

02:08 15 A. The inventor was endeavoring to produce an
02:08 16 illuminator having collimated light output.

02:08 17 Q. Okay. And the title uses the word
02:08 18 "collimating"?

02:08 19 A. Yes.

02:08 20 Q. If the jury wants to track that as they go
02:08 21 back into deliberations, where would they look to find
02:08 22 this?

02:08 23 A. The cover, the first page.

02:09 24 Q. Okay. Thank you.

02:09 25 Now, you mentioned that these two

02:09 1 light-collimating patents began with a solar collector
02:09 2 embodiment; is that correct?

02:09 3 A. Yes.

02:09 4 Q. And that then was reversed?

02:09 5 A. Yes.

02:09 6 Q. Can you walk the jury using -- or walk the
02:09 7 jury through this using Figure 13 and Figure 27 to see
02:09 8 that concept?

02:09 9 A. Sure. So in Figure 13, the solar energy
02:09 10 example is shown, and you can see again there's this
02:09 11 theme of the lens and the deflecting element working in
02:09 12 coordination with each other. And -- just like in the
02:09 13 previous patents.

02:09 14 And what the inventor has done here is he sort
02:09 15 of extended the concept of these rays bouncing around
02:09 16 and now coming to a solar cell at the edge. And so
02:10 17 what he's done is called in the parlance of the solar
02:10 18 industry a "solar concentrator."

02:10 19 Q. Okay. And how does he get from the solar
02:10 20 concentrator to a light emitter?

02:10 21 A. So on the right, the emitting embodiment is
02:10 22 shown. He replaces the solar cell with an LED. And so
02:10 23 as he's depicted here, all the rays go backwards, and
02:10 24 so the light emanating from the deflecting elements
02:10 25 becomes perfectly collimated in output, which was his

02:10 1 goal.

02:10 2 Q. Now, in your experience in 35 years in this
02:10 3 field, would simply reversing a light collector create
02:10 4 a good design for a display?

02:10 5 A. It's a bad design for a display because you
02:10 6 don't want collimated light coming out of the optical
02:10 7 light guide plate.

02:10 8 Q. In the display?

02:10 9 A. Correct.

02:10 10 Q. Why not?

02:11 11 A. Well, because if the light from this display,
02:11 12 for example, were collimated, it would be coming
02:11 13 straight out at me, which would be very odd. As I'm
02:11 14 looking at it, it would be like this beam of light
02:11 15 coming at me. And if I were to go off to the side, I
02:11 16 wouldn't be able to see it.

02:11 17 Q. Okay. Let's go to Figure 27 in just a little
02:11 18 more depth.

02:11 19 Could you explain for the jury what it is
02:11 20 about the design of this light guide in Figure 27 that
02:11 21 results in collimation of the light?

02:11 22 A. A necessary design feature to produce
02:11 23 collimation is that the deflecting elements are in
02:11 24 alignment with the lenses. And so this is this common
02:11 25 theme through all the patents of this coordination

02:11 1 between the deflecting elements and the lens.

02:11 2 Q. So to accomplish this collimation, do the
02:11 3 lenses need to be in a -- does a lens need to be in a
02:11 4 pair with a deflecting element?

02:12 5 A. Correct. He even has a term for it. It's
02:12 6 called an "opticule."

02:12 7 Q. What does that mean?

02:12 8 A. That's his term for the combination of the
02:12 9 deflecting element and the lens.

02:12 10 Q. Okay. So a one-to-one correspondence there?

02:12 11 A. Yes.

02:12 12 Q. And there needs to be an alignment, correct?

02:12 13 A. Yes.

02:12 14 Q. Now, if we go to this slide here, are you
02:12 15 going for narrow viewing angles in a display?

02:12 16 A. No. The specification is to have a wide
02:12 17 viewing angle, as wide as possible.

02:12 18 Q. Why would you want a wide viewing angle in a
02:12 19 display?

02:12 20 A. So that everyone can see it.

02:12 21 Q. What happens if you have a very parallel light
02:12 22 emission coming from your display?

02:12 23 A. If the light were collimated coming from the
02:12 24 display, you would only be able to see a bright beam of
02:12 25 light when you were directly in front of it.

02:13 1 Q. Would it look something like the demonstrative
02:13 2 we have on the Slide 35?

02:13 3 A. Yes.

02:13 4 Q. Would someone sitting off to the side be able
02:13 5 to view a display that uses collimated light very well?

02:13 6 A. No.

02:13 7 Q. Similar process as we've done for the previous
02:13 8 two patents. First, let's correlate the claim concepts
02:13 9 with the figure we've been looking at, if that's all
02:13 10 right with you.

02:13 11 A. Sure.

02:13 12 Q. Could you do that for the jury? We're looking
02:13 13 at Claim 1 of the '342 patent on the left; Figure 27 on
02:13 14 the right.

02:13 15 A. Yes. So one of the claim requirements is that
02:13 16 the light-deflecting elements are in a predetermined
02:13 17 alignment with the lenses. And so that's indicated
02:13 18 here by, you know, the alignment between the deflecting
02:13 19 elements 14 and the lenses 6.

02:13 20 Q. So just to be clear, the alignment we're
02:14 21 talking about in the claim is between the lenses and
02:14 22 deflecting elements?

23 A. Correct.

02:14 24 Q. Going to the next step, comparing that claim
02:14 25 understanding to the accused products.

1 A. Yes.

02:14 2 Q. What are we seeing on the right-hand --
02:14 3 right-hand side of Slide 38?

02:14 4 A. So this is Credelle's theory of alignment,
02:14 5 which is by showing that if two of the deflecting
02:14 6 elements happen to line up in the middle of the
02:14 7 cylindrical lenses, that demonstrates predetermined
02:14 8 alignment. And I disagree with that.

02:14 9 It's like you -- imagine you took a box of
02:14 10 checkers and you spread them out on a checkerboard.
02:15 11 And one of them happened to line up on the square. And
02:15 12 you would go, oh, aha. It's all predetermined.
02:15 13 There's an alignment.

02:15 14 Of course it's ridiculous because the act of
02:15 15 pouring the checkers on the checkerboard was completely
02:15 16 random.

02:15 17 Q. And just to be clear, in that example, you're
02:15 18 not talking about placing the checkers on the
02:15 19 checkerboard, right?

02:15 20 A. No. Just take a box and kind of dumping it on
02:15 21 in a random fashion.

02:15 22 Q. So the checkers end up random?

02:15 23 A. Yes.

02:15 24 Q. While the board would be aligned?

25 A. Correct.

02:15 1 Q. How do you get random and linear squares on a
02:15 2 checkerboard aligned?

02:15 3 A. It doesn't make any sense.

02:15 4 Q. Now, I just want to back up a little bit and
02:15 5 walk through this a little bit slower.

02:15 6 What picture is this on the right-hand
02:15 7 slide -- right hand of the slide? I'm sorry.

02:15 8 A. This is a microphotograph taken by
02:15 9 Mr. Credelle, I believe.

02:15 10 Q. And why are you using Mr. Credelle's picture
02:16 11 here?

02:16 12 A. Just generally, my role here as the
02:16 13 noninfringement expert was to rebut his infringement
02:16 14 report.

02:16 15 Q. Is there any dispute over the -- what's going
02:16 16 on in the accused products?

02:16 17 A. No. Mr. Credelle and I are both in agreement
02:16 18 that the deflecting elements are randomly distributed.

02:16 19 Q. Now, deflecting elements, we see a lot of dots
02:16 20 in this picture, correct?

02:16 21 A. Correct.

02:16 22 Q. Are those the deflecting elements?

02:16 23 A. Yes.

02:16 24 Q. And how are they distributed in the accused
02:16 25 products?

02:16 1 A. Both Mr. Credelle and I and everyone else, it
02:16 2 appears, agree they are randomly distributed.

02:16 3 Q. And what's the simplest way of seeing that?

02:16 4 A. I mean, you can just look at the picture and
02:16 5 see that they're not following any pattern or regular
02:16 6 distribution.

02:16 7 From one dot to the next, you can't predict
02:16 8 the position. You could use -- for example, if you
02:16 9 wanted to prove to yourself you're a random, I recall a
02:17 10 conversation I had with a colleague of mine once at
11 Bell Laboratories. We were talking about predicting
12 the stock market.

02:17 13 And so he finally said, okay. Let's take a
02:17 14 graph of the stock market and cover up the right-hand
02:17 15 side. All right. Tell me what happens?

02:17 16 And of course you can't.

02:17 17 And so if you tried this experiment here where
02:17 18 you covered up the right hand of the photograph and
02:17 19 then I asked you, Okay, tell me where all the dots are,
02:17 20 I contend you wouldn't be able to do that because
02:17 21 they're randomly positioned.

02:17 22 Q. Now, the lenses are the linear lines going
02:17 23 horizontally across the picture here, right?

02:17 24 A. Yes. They are on a regular array.

02:17 25 Q. So let me ask you this: If you have randomly

02:17 1 placed dots, microcavities, and you have linear lenses,
02:17 2 how can those two be in a predetermined alignment?

02:17 3 A. They cannot be.

02:17 4 Q. Why not?

02:18 5 A. Because it doesn't make sense to talk about
02:18 6 one set of things having a random distribution having a
02:18 7 predetermined alignment with another set of things
02:18 8 having a regular array of distribution.

02:18 9 Q. Okay. Would it make sense from your
02:18 10 perspective, as a 35-year optical industry veteran, to
02:18 11 have two surface relief features out of millions placed
02:18 12 in some sort of alignment?

02:18 13 A. It would not.

02:18 14 Q. Why not?

02:18 15 A. Well, first of all, I mean, there are anywhere
02:18 16 from about 1 to 10 million of these deflecting elements
02:18 17 in any of the light guide plates of any of the products
02:18 18 we've been shown. And so having two, I mean, there's
02:18 19 no reason to do it. It serves no purpose.

02:18 20 Q. Now, in your opinion, in light of all you've
02:18 21 considered and outlined for the jury here today, how
02:19 22 does the accused products compare to the claim
02:19 23 limitation of the '342 patent?

02:19 24 A. The accused products do not meet the claim
02:19 25 limitation.

02:19 1 Q. What does that mean for purposes of the
02:19 2 question of infringement?

02:19 3 A. The accused products do not infringe the
02:19 4 claim.

02:19 5 Q. Okay. Once again, we have a dependent claim
02:19 6 in the '342 patent as well. It's Claim 21.

02:19 7 Can you explain to the jury once again how
02:19 8 your analysis on Claim 1 impacts Claim 21?

02:19 9 A. Since Claim 21 depends upon Claim 1, if
02:19 10 Claim 1 is not infringed, neither is Claim 21.

02:19 11 Q. One last question on this before we move on,
02:19 12 or maybe a couple of questions.

02:19 13 Dr. Credelle mentioned some CAD files or
02:20 14 engineering specs, something to that effect.

02:20 15 What does that have to do with this?

02:20 16 A. Nothing.

02:20 17 Q. Why not?

02:20 18 A. Because the claim requires alignment to exist
02:20 19 as a structure. And so you don't have to even think
02:20 20 about what happens before the structure is made. The
02:20 21 claim doesn't describe manufacturing. It doesn't
02:20 22 describe a process. It only describes the resulting
02:20 23 structure.

02:20 24 And since the resulting structure in the
02:20 25 product is a regular array of lenses and a randomly

02:20 1 placed deflecting element, there's no way, regardless
02:20 2 of how they were made, they can meet the claim.

02:20 3 Q. All right. Three down and one to go.

02:20 4 Now, Dr. Goossen, with respect to the '562
02:20 5 patent, I'm not going to walk you through the figures
02:20 6 again.

02:20 7 Why is that?

02:20 8 A. We're already in agreement that there's no
02:21 9 pattern.

02:21 10 Q. Let me try this another way.

02:21 11 Is the '562 a continuation of the patent we
02:21 12 just looked at?

02:21 13 A. Yes. It has the same description.

02:21 14 Q. So everything you just said for the '342
02:21 15 applies contextually to the '562?

02:21 16 A. Correct.

02:21 17 Q. Okay. So we can turn straight to the claim?

02:21 18 A. Yes.

02:21 19 Q. Here, the claim limitation requires a surface
02:21 20 relief -- requires a plurality of surface relief
02:21 21 features formed in the second broad-area surface
02:21 22 according to a predetermined two-dimensional pattern.
02:21 23 Correct?

24 A. Correct.

02:21 25 Q. Just so we're all on the same page, what is

02:21 1 two dimensions talking about?

02:21 2 A. Well, in light of the examples in the patent,
02:22 3 the two dimensions would be, one dimension would be
02:22 4 along the axis of the lenses, and the other dimension
02:22 5 would be perpendicular to that axis.

02:22 6 Q. So like a kind of XY for those who remember
02:22 7 their geometry class?

02:22 8 A. Yeah. Like a grid.

02:22 9 Q. Are the surface relief features in the accused
02:22 10 representative product in a predetermined
02:22 11 two-dimensional pattern?

02:22 12 A. No. They are random.

02:22 13 Q. Why is random not a predetermined
02:22 14 two-dimensional pattern?

02:22 15 A. A pattern implies that you can predict from
02:22 16 one dot to the next where each one is, and you can't do
02:22 17 that.

02:22 18 I mean, you know, patterns are like -- you
02:22 19 know, my mom was a quilter. And so, you know, she
02:22 20 would make like a quilt, and she would show it to me.
02:22 21 And she would say, see this quilt.

02:22 22 And of course since I knew about her quilts,
02:23 23 like a wedding ring pattern, I could see, oh, yeah. I
02:23 24 can see that's the pattern.

02:23 25 And so you can see there's no pattern that the

02:23 1 deflecting elements exist in.

02:23 2 Q. And, Dr. Goossen, why -- in the context of
02:23 3 these two patents, why would you want predetermined
02:23 4 patterns, predetermined alignment?

02:23 5 A. You don't want it because you don't want any
02:23 6 of the elements to collimate. You want uniform
02:23 7 distribution of light, and so you would not want any
02:23 8 patterning or any alignment.

02:23 9 Q. In the accused products, by using random
02:23 10 surface relief features instead of patterned surface
02:23 11 relief features, what are the accused products
02:23 12 accomplishing?

02:23 13 A. By using a random distribution of deflecting
02:23 14 elements, the products are achieving this uniform
02:23 15 distribution of light from the light guide plate, which
02:24 16 means not just that the light is -- has a uniform
02:24 17 intensity, but also at any point, the light is coming
02:24 18 off in all directions. And so that's the perfect
02:24 19 backlight for the LCD display then.

02:24 20 Q. Backlights want to create a cloud of light?

02:24 21 A. Basically, yes.

02:24 22 Q. And how do you create a cloud of light?

02:24 23 A. Well, a random distribution.

02:24 24 Q. If instead of having a random distribution in
02:24 25 the accused products we replaced it with Dr. Vasylyev's

02:24 1 design of a patterned deflection elements, what would
02:24 2 happen?

02:24 3 A. Well, the pattern would be conveyed into the
02:24 4 light output, and so you would see some pattern of
02:24 5 light on the output of the screen.

02:24 6 Q. And would it reduce the viewing angles
02:24 7 provided by a display?

02:24 8 A. Yes. Because the pattern of light coming out
02:24 9 would be collimated generally.

02:24 10 Q. So in the context of the '562 patent,
02:24 11 specifically Claim 1 requiring the predetermined
02:25 12 two-dimensional pattern, in light of all you've
02:25 13 analyzed and outlined to the jury here today, what is
02:25 14 your conclusion with respect to whether the
02:25 15 representative accused product practices this claim?

02:25 16 A. The products do not practice the claim.

02:25 17 Q. And by "practice," I mean infringe.
02:25 18 Do they infringe the claim?

02:25 19 A. They do not infringe the claim.

02:25 20 Q. There is finally a dependent claim, Claim 7 of
02:25 21 the '562 patent, that has also been asserted here.

02:25 22 For the last time, can you explain to the jury
02:25 23 how your analysis of Claim 1 of the '562 patent applies
02:25 24 to Claim 7?

02:25 25 A. Again, since Claim 7 depends upon Claim 1,

02:25 1 Claim 1, if is not met by the product, neither is
02:25 2 Claim 7.

02:25 3 Q. And now, Dr. Goossen, I believe that is all
02:25 4 four patents. Have I missed any?

02:25 5 A. That's all four in this case.

02:25 6 Q. Okay. So in view of your discussion here
02:25 7 today, the analysis you've conducted, overall, what is
02:26 8 your conclusion with respect to the two representative
02:26 9 products and whether they infringe Dr. Vasylyev's
02:26 10 patents?

02:26 11 A. My conclusion is that none of the accused
02:26 12 products infringe any of the asserted claims.

02:26 13 Q. Thank you, Dr. Goossen.

02:26 14 MR. BURESH: I pass the witness.

02:26 15 CROSS-EXAMINATION

02:26 16 BY MR. MCCARTY:

02:27 17 Q. Good afternoon, Dr. Goossen.

02:27 18 A. Good afternoon.

02:27 19 Q. My name is Warren McCarty. I represent the
02:27 20 plaintiff SVV in this case.

02:27 21 We've not actually met, I don't think,
02:27 22 correct?

02:27 23 A. I don't think so.

02:27 24 Q. Okay. Now, you're presenting as an
02:27 25 infringement expert witness today, correct?

02:27 1 A. Noninfringement expert.

02:27 2 Q. And what that means is you've been hired by
02:27 3 ASUSTeK, the defendant in this case, to present
02:27 4 testimony today, correct?

02:27 5 A. I'm being paid to provide testimony. Yes.

02:27 6 Q. You've been working as an expert witness in
02:27 7 patent cases for over a decade, correct?

02:27 8 A. The last time I was in court was about eight
02:28 9 years ago, I think.

02:28 10 Q. I wasn't asking the last time you were in
02:28 11 court, sir. I was asking if you had been working in
02:28 12 patent cases as an expert witness for over a decade.

02:28 13 A. Oh, okay. Yes. That's true. I'm sorry. I
02:28 14 thought you were asking when I had last testified.

02:28 15 Q. And I don't want to belabor this point, but I
02:28 16 just want to make sure that I put this in a context.
02:28 17 Your resume lists a lot of cases that you've been
02:28 18 involved in; I counted over 14.

02:28 19 Does that sound about right?

02:28 20 A. A lot of them are essentially the same case.

02:28 21 Q. Your resume lists over 14 different cases that
02:28 22 you were an expert for, correct?

02:28 23 A. Legal cases, yes.

02:28 24 Q. And you were here during the testimony of
02:28 25 SVV's expert, Mr. Tom Credelle, correct?

02:28 1 A. Correct.

02:28 2 Q. Mr. Credelle worked on several cases before.

02:28 3 He testified about that, correct?

02:28 4 A. I believe so. Yes.

02:28 5 Q. There's nothing wrong about that, is there?

02:29 6 A. No.

02:29 7 Q. Okay. You said he only goes into a case after
02:29 8 confirming that the patent was being used and that the
02:29 9 case had strong merit.

02:29 10 Do you recall that testimony?

02:29 11 A. I believe so, yes.

02:29 12 Q. And you don't dispute that Mr. Credelle is an
02:29 13 expert in the field of LCD displays, correct, sir?

02:29 14 A. Correct.

02:29 15 Q. Okay. He helped invent the original LCD flat
02:29 16 panel for RCA.

02:29 17 Do you remember that testimony?

02:29 18 A. Yes. I saw that here.

02:29 19 Q. And I think at Apple, he helped create the
02:29 20 first laptop with an LCD display.

02:29 21 Do you recall that?

02:29 22 A. Yes.

02:29 23 Q. Okay. So you're not criticizing his
02:29 24 credentials. You're not saying he doesn't know what
02:29 25 he's talking about from a LCD display perspective?

02:29 1 A. I'm not.

02:29 2 Q. Okay. You've actually never testified about
02:29 3 display technology in the past, correct?

02:29 4 A. No. I don't believe so.

02:29 5 Q. This is a case about displays, correct?

02:30 6 A. Yeah.

02:30 7 Q. I took a look at your resume, and I respect
02:30 8 your career and you've got a lot of publications. But
02:30 9 there wasn't a one of them that said "LCD" in those
02:30 10 publications. So you've never written about LCD
02:30 11 screens, correct?

02:30 12 A. I've never published a paper on liquid crystal
02:30 13 displays, but I teach it in my courses.

02:30 14 Q. You have experience in fiber optics, correct?

02:30 15 A. I do.

02:30 16 Q. Fiber optics is another application of light
02:30 17 and optic technology, correct?

02:30 18 A. It's very similar. Yes.

02:30 19 Q. So fiber optics, displays, solar, those are
02:30 20 all examples of ways to use light, correct?

02:30 21 A. Yes. There's a great deal of similarity
02:30 22 between fiber optics and the light guide plates in this
02:30 23 case.

02:30 24 Q. Light is light, correct, sir?

02:31 25 A. Is that a question? I mean, light is an

02:31 1 electromagnetic wave.

02:31 2 Q. Now, you were here yesterday and I think today
02:31 3 when -- the testimony of ASUSTeK's corporate witness,
02:31 4 James Lee, correct?

02:31 5 A. Yes.

02:31 6 Q. Do you remember when Mr. Caldwell asked
02:31 7 Mr. Lee about hiring you to testify about technical
02:31 8 information?

02:31 9 A. I think I remember that. Yeah.

02:31 10 MR. MCCARTY: Okay. Mr. Diaz, can I get
02:31 11 Slide 3?

02:31 12 BY MR. MCCARTY:

02:31 13 Q. Do you recall this testimony? It was a
02:31 14 question from my colleague Mr. Caldwell asking:

02:31 15 You looked for technical witnesses to testify
02:31 16 at trial, technical witnesses you would hire to
02:31 17 testify?

02:31 18 I believe so.

02:31 19 Who are they?

02:31 20 I think they are people who are hired by our
02:31 21 attorneys.

02:31 22 Do you know any of their names?

02:31 23 And then he identifies you.

02:31 24 Are you that Keith, sir?

02:31 25 A. Yes. I'm Keith.

02:32 1 Q. Okay. And you were hired by ASUS' lawyers,
02:32 2 correct?

02:32 3 A. Actually, I was hired by the previous
02:32 4 attorneys in the case.

02:32 5 Q. Who are they?

02:32 6 A. Procopio.

02:32 7 Q. Who?

02:32 8 A. Just this case, I wasn't -- I was hired on
02:32 9 this case by the previous attorneys that were handling
02:32 10 ASUS -- or representing ASUS, I'm sorry.

02:32 11 Q. Instead of bringing ASUS engineers to explain
02:32 12 the technical issues in the case about the LCD
02:32 13 products, you were hired to be the technical witness in
02:32 14 this case, correct?

02:32 15 MR. BURESH: Can I move this out of the
02:32 16 way?

02:32 17 THE COURT: I was literally about to ask
02:32 18 him to do that.

02:32 19 MR. MCCARTY: I'll do it.

02:32 20 THE COURT: Fine. I just couldn't see
02:32 21 counsel.

02:32 22 BY MR. MCCARTY:

02:33 23 Q. Okay. I don't know if we got an answer on
02:33 24 that last one, so if I could ask it again, okay, sir?

02:33 25 Instead of bringing engineers from the company

02:33 1 to explain the technical issues about the products,
02:33 2 ASUS hired you to be a technical witness in this case,
02:33 3 correct?

02:33 4 A. I was hired as a technical witness. I'm not
02:33 5 sure if there was any decision made of me versus anyone
02:33 6 else.

02:33 7 Q. You were here during the testimony of Mr. Lee,
02:33 8 right?

02:33 9 A. Yes.

02:33 10 Q. He said they looked for witnesses, and they
02:33 11 hired you. Right, sir?

02:33 12 A. Yes.

02:33 13 Q. Okay.

02:33 14 A. Yes. I mean, I'm one. I mean, I think they
02:34 15 hired other witnesses as well.

02:34 16 Q. We'll talk about that.

02:34 17 But over the years, you have performed a lot
02:34 18 of research on optical systems, correct?

02:34 19 A. Correct.

02:34 20 Q. You -- and you have a website. You say you do
02:34 21 research a lot, correct?

02:34 22 A. I don't know how up to date my website is, I'm
02:34 23 sorry.

02:34 24 Q. I'm not going to criticize the website. I
02:34 25 just want to make sure we're kind of on a level par

02:34 1 about your experience and your work history.

02:34 2 So you've done a lot of research in your time
02:34 3 on issues related to optics, correct?

02:34 4 A. Yes. I've published somewhere over 300 papers
02:34 5 on the subject.

02:34 6 Q. You've done work to produce fiber-optic
02:34 7 modules, correct?

02:34 8 A. That's part of my research. Yes.

02:34 9 Q. You've -- you performed investigations into
02:34 10 products like solid-state devices and nano electronics,
02:34 11 other devices in this field, correct?

02:34 12 A. Are you talking about my expert witness work?

02:34 13 Q. No. Just your work in the field.

02:35 14 A. My work in the field spans everything from
02:35 15 quantum mechanical optics to solar energy to display
02:35 16 technology. That's why when I was approached to be an
02:35 17 expert, I thought I would be able to do a good job.

02:35 18 Q. You used to work at a place called Bell Labs;
02:35 19 we saw that earlier, right?

02:35 20 A. Correct.

02:35 21 Q. And I'm guessing by the name of that company,
02:35 22 there was at least one lab in that building, right?

02:35 23 A. There were many labs.

02:35 24 Q. And you have a lab at your university where
02:35 25 you teach, I'm assuming?

02:35 1 A. Yes. I do.

02:35 2 Q. And on your resume, you say you've got
02:35 3 12 years of experience in industrial laboratories,
02:35 4 correct?

02:35 5 A. Industrial laboratories?

02:35 6 Q. Yes, sir.

02:35 7 A. Well, I've had my laboratory at the University
02:35 8 of Delaware since I've been there in 2002.

02:35 9 Q. If you wrote in your resume that you have
02:35 10 12 years of experience in industrial laboratories,
02:35 11 you're talking about your university?

02:35 12 A. I'm not sure what -- you'll have to recall for
02:36 13 me on my resume where it says industrial laboratories.

02:36 14 Q. The point is, you know your way around a
02:36 15 laboratory, correct, sir?

02:36 16 A. I think so.

02:36 17 Q. But, Dr. Goossen, in your presentation of all
02:36 18 the technical issues in this case to the jury just now,
02:36 19 you didn't show a single image that you took of the
02:36 20 products in a laboratory, correct?

02:36 21 A. I didn't show them here. I have them if you
02:36 22 want them.

02:36 23 Q. You didn't show a single microscopic image of
02:36 24 any of the products that you took in a laboratory,
02:36 25 correct?

02:36 1 A. That's correct. As I said earlier, my role
02:36 2 here is to rebut Mr. Credelle's report, and so I used
02:36 3 his figures.

02:36 4 MR. MCCARTY: Objection, Your Honor.

02:36 5 THE COURT: Sustained. The jury will
02:36 6 disregard.

02:36 7 BY MR. MCCARTY:

02:36 8 Q. You didn't show the jury a single picture that
02:36 9 you took in a laboratory with the products, correct?

02:37 10 A. Correct.

02:37 11 Q. You didn't show the results of a single test
02:37 12 that you ran on the products in a laboratory, correct?

02:37 13 A. My results matched Mr. Credelle's. I don't
02:37 14 dispute his examples.

02:37 15 Q. I'm not trying to be disrespectful, but we
02:37 16 have limited time. So if you could please answer my
02:37 17 questions as I've asked them. Okay, sir?

02:37 18 A. It's correct.

02:37 19 Q. You didn't show a single 3D microscope image
02:37 20 of the accused products, correct?

02:37 21 A. Correct. That I took. Yes.

02:37 22 MR. MCCARTY: Can I get my slides?

02:37 23 BY MR. MCCARTY:

02:37 24 Q. Rather than go through tests, images, original
02:37 25 data, we see images like this, which is clip art,

02:37 1 correct, sir?

02:37 2 A. It's a depiction.

02:37 3 Q. And pictures of farmhouses with solar panels
02:38 4 on the roof, correct, sir?

02:38 5 A. I don't think that is a farmhouse.

02:38 6 Q. Dr. Goossen, when the jury is analyzing
02:38 7 infringement in this case, should they compare the ASUS
02:38 8 products to SVV's patent claims, or ASUSTeK's products
02:38 9 to pictures of houses and clip art?

02:38 10 A. The claims define the scope of the invention.

02:38 11 Q. When the jury's going back and deliberating
02:38 12 and determining infringement, should it compare the
02:38 13 products to the patent claims or the products to
02:38 14 pictures of a house with solar panels on it?

02:38 15 A. You should compare the products to what's
02:38 16 written in the claims, but you should understand the
02:38 17 claims based upon what's written in the patent.

02:38 18 Q. And that's why the Court has construed the
02:38 19 claims in this cause, correct, sir?

02:38 20 A. Yes. But many of the constructions were plain
02:38 21 and ordinary meaning, which means you have to look to
02:38 22 the specification to determine meaning.

02:39 23 MR. MCCARTY: Your Honor, may I please
02:39 24 have some help with this witness?

02:39 25 THE COURT: Well, you're asking him -- he

02:39 1 gets to answer the questions. If you can give him a
02:39 2 yes-or-no question, he can do it. But he gets to
02:39 3 explain what his answer is.

02:39 4 BY MR. MCCARTY:

02:39 5 Q. The Court has provided a claim construction
02:39 6 order in this case.

02:39 7 Do you understand that?

02:39 8 A. Yes.

02:39 9 Q. Okay. Now, as an infringement expert, you're
02:39 10 well aware that the basic principles require an
02:39 11 element-by-element analysis for infringement, correct?

02:39 12 A. Correct.

02:39 13 Q. Okay. To determine infringement, you must
02:39 14 compare ASUSTeK's products to SVV's patent claims,
02:39 15 correct, sir?

02:39 16 A. Correct.

02:39 17 Q. I've wrote on the board "Rule 1, products to
02:40 18 claims" to reflect that. Okay, sir?

02:40 19 A. Okay.

02:40 20 Q. You do not take examples or embodiments from
02:40 21 the specification and import them into the claims,
02:40 22 correct, sir?

02:40 23 A. I at least partially disagree with that.

02:40 24 Q. You understand that courts generally do not
02:40 25 import limitations into claims from examples or

02:40 1 embodiments appearing only in a patent's written
02:40 2 description even when a specification describes very
02:40 3 specific embodiments of the invention or even only a
02:40 4 single embodiment, correct, sir?

02:40 5 A. I'm trying to follow everything you just said.
02:40 6 I guess I agree.

02:40 7 Q. And for shorthand, I've wrote: Rule 2, do not
02:41 8 import from specification.

02:41 9 Do you see that, sir?

02:41 10 A. Yes. I see that, sir. But again, I obtained
02:41 11 particular legal guidance when doing this work, and
02:41 12 that legal guidance was that I must understand the
02:41 13 claim elements in light of what's written in the
02:41 14 patent's description. And I believe that I read that
02:42 15 from case law.

02:42 16 Q. Speaking of claim elements, sir, those are
02:42 17 these ones right here, correct?

02:42 18 A. I think they're all there.

02:42 19 Q. We walked through them with Mr. Credelle;
02:42 20 checked every single one of them.

02:42 21 You were here in court that day, weren't you?

02:42 22 A. Yes.

02:42 23 Q. And so when you say you got a look at those
02:42 24 claim elements, you're talking about those ones on the
02:42 25 screen, correct, sir?

02:42 1 A. If they're all there, yes.

02:42 2 Q. Sir, light trapping is not a claim limitation,
02:42 3 is it, sir?

02:42 4 A. Correct.

02:42 5 Q. Light harvesting is not a claim limitation, is
02:42 6 it, sir?

02:42 7 A. Correct.

02:42 8 Q. Light collimation is not a claim limitation,
02:42 9 is it, sir?

02:42 10 A. Correct.

02:42 11 Q. Solar energy is not a claim limitation, is it,
02:42 12 sir?

02:42 13 A. Correct.

02:42 14 Q. I have a copy of your slides that you just did
02:42 15 with your lawyer. It's about 46 slides.

02:42 16 Does that sound right?

02:42 17 A. I guess so.

02:42 18 Q. I counted them up. And over half use the
02:42 19 words "solar energy," "collimation," "light
02:43 20 harvesting," "light trapping."

02:43 21 Does that sound about right?

02:43 22 A. I felt it was important to explain the patents
02:43 23 to the jury.

02:43 24 Q. And not a single one of those terms is even in
02:43 25 the claims that the jury have to look at when they're

02:43 1 making their decision on infringement, correct?

02:43 2 A. Correct. And I used none of those in terms --
02:43 3 in my infringement analysis -- noninfringement
02:43 4 analysis.

02:43 5 Q. You disregarded those terms, correct, sir?

02:43 6 A. I did not use them.

02:43 7 Q. And the jury shouldn't either, correct, sir?

02:43 8 A. I won't agree with that.

02:43 9 Q. So you think the jury should consider other
02:43 10 things than the claims --

02:43 11 THE COURT: Counsel, will you --

02:43 12 (Bench conference.)

02:43 13 THE COURT: I don't know what you're
02:43 14 doing. I'm going to instruct the jury on what they can
02:43 15 consider. This is all -- the reason I'm not
02:43 16 intervening, it's all irrelevant. If you want to say
02:43 17 it's -- you got him to say it's limited to the claims,
02:44 18 I'm going to tell them, it's limited to the claims.
02:44 19 That's you all's back-and-forth. I don't know why he
02:44 20 hasn't objected under 401.

02:44 21 None of this is relevant, unless -- he
02:44 22 didn't on direct import anything. He didn't do it. I
02:44 23 didn't let him. And so I don't know why we've wasted
02:44 24 the last 15 minutes with this back-and-forth.

02:44 25 So I mean, he's letting you because it

02:44 1 hasn't gone anywhere.

02:44 2 MR. MCCARTY: I'll move on. I just
02:44 3 wanted to establish those --

02:44 4 MR. BURESH: Keep going.

02:44 5 THE COURT: That's why he hasn't objected
02:44 6 is because the last 15 minutes have had nothing to
02:44 7 do --

02:44 8 MR. BURESH: This is great stuff for
02:44 9 opening. I encourage it.

02:44 10 I'm sorry, Your Honor. I do apologize
02:44 11 for that comment.

02:44 12 THE COURT: You can move on.

02:44 13 MR. MCCARTY: Yes, Your Honor.

02:44 14 (Bench conference concludes.)

02:44 15 BY MR. MCCARTY:

02:45 16 Q. One last question, sir.

02:45 17 Should the jury follow the Court's
02:45 18 instructions when deciding infringement or your
02:45 19 guidance that you just expressed or your understanding
02:45 20 of the law?

02:45 21 A. The jury should always follow the Court's
02:45 22 instructions.

02:45 23 Q. Thank you.

02:45 24 Now, you agree, sir, that ASUSTeK sells the
02:45 25 accused products in the United States?

02:46 1 A. I believe so. Yes.

02:46 2 Q. You agree that ASUSTeK offers to sell the
02:46 3 accused products in the United States?

02:46 4 A. I guess so. I'm not sure I know. But, I
02:46 5 mean, offering -- I mean, they're for sale. You can go
02:46 6 buy them in a store.

02:46 7 Q. You agree that ASUSTeK imports the accused
02:46 8 products into the United States?

02:46 9 A. I believe they're manufactured outside the
02:46 10 United States. Yes.

02:46 11 Q. And imported into the United States?

02:46 12 A. I think that's what that would mean.

02:46 13 Q. And those would all constitute acts of
02:46 14 infringement under Section 271(a), correct?

02:46 15 A. Well, I don't know the exact code. But yes.
02:46 16 That would be infringement.

02:46 17 Q. Were you here -- to orient the jury, I'm going
02:46 18 to address some of those noninfringement arguments that
02:46 19 you went through on your direct examination. Okay?

02:46 20 A. Yes.

02:46 21 Q. All right. Were you here when Mr. Credelle
02:47 22 was explaining that a randomized two-dimensional
02:47 23 pattern was an irregular pattern?

02:47 24 A. Yes. I heard that.

02:47 25 Q. Okay. You've told us before that something

02:47 1 cannot be random and also have a pattern at the same
02:47 2 time, correct?

02:47 3 A. What I meant is that a pattern must be
02:47 4 recognizable like a grid.

02:47 5 Q. Sir, you've told us before that something
02:47 6 cannot be random and also have a pattern at the same
02:47 7 time, correct?

02:47 8 A. Correct.

02:47 9 Q. And that position was based on looking up the
02:47 10 definition of random and the definition of pattern in a
02:47 11 general Webster's dictionary, correct?

02:47 12 A. It's based upon my experience in the field
02:47 13 that random is one thing and a pattern is something
02:47 14 else.

02:47 15 Q. Sir, can you turn in your binder to Tab No. 1?
02:48 16 These are some of your opinions in the case. If you'd
02:48 17 go to Paragraph 118.

02:48 18 Are you there, sir?

02:48 19 A. Yes.

02:48 20 Q. And here you're citing Webster's dictionary,
02:48 21 correct, sir?

02:48 22 A. Yes. I'm saying first, the term "random"
02:48 23 means lacking a definite plan, purpose or pattern.

02:48 24 Q. Are you familiar with the International
02:48 25 Society of Optical Engineering?

02:48 1 A. You mean SPIE?

02:48 2 Q. Yes, sir. It's a group that publishes
02:48 3 articles in the field that we're talking about, optical
02:48 4 engineering, correct?

02:48 5 A. Yes.

02:48 6 Q. Okay. You understand that a quick search of
02:48 7 their website shows random pattern is very common in
02:49 8 this field?

02:49 9 MR. BURESH: Objection, assumes facts not
02:49 10 in evidence.

02:49 11 MR. MCCARTY: It's cross-examination.
02:49 12 I'm showing him contrary examples to what he's offered
02:49 13 as an opinion.

02:49 14 MR. BURESH: This is not in evidence nor
02:49 15 is it a demonstrative. I don't know why he's showing
02:49 16 it to him.

02:49 17 THE COURT: Sustained.

02:49 18 BY MR. MCCARTY:

02:49 19 Q. Okay. You don't disagree that in the field,
02:49 20 random pattern -- field of optics, random pattern is a
02:49 21 known thing?

02:49 22 A. I would have to see specific discussions of it
02:49 23 in order to understand what they meant by that term.

02:49 24 Q. Okay. You know that ASUS had another
02:49 25 technical expert besides you, correct, sir?

02:49 1 A. I think they have several experts. Who are
02:49 2 you referring to?

02:49 3 Q. Dr. Coleman.

02:49 4 A. Yes. I believe so.

02:49 5 MR. BURESH: Objection, Your Honor. 401.

02:49 6 THE COURT: Sustained.

02:49 7 BY MR. MCCARTY:

02:50 8 Q. Do you understand, sir, that another expert in
02:50 9 this case contradicted your position on random pattern?

02:50 10 THE COURT: Sustained.

02:50 11 There's -- you're not going into what
02:50 12 another expert that the jury's not going to hear from.
02:50 13 It's not going to happen.

02:50 14 MR. BURESH: Your Honor, I'd also --

02:50 15 THE COURT: The jury will also disregard
02:50 16 the question or the fact that there were any -- the
02:50 17 only evidence that you are to consider in this trial is
02:50 18 what you hear from this chair. The fact that other
02:50 19 people outside this courtroom may have said things is
02:50 20 completely irrelevant to your decision in this case.

02:50 21 BY MR. MCCARTY:

02:50 22 Q. Now, it's your opinion that microstructures in
02:50 23 ASUSTeK's accused products do not meet the
02:50 24 predetermined two-dimensional pattern claim element,
02:50 25 correct? We saw that just now?

02:50 1 A. The deflecting element, yes. Correct.

02:50 2 They're random.

02:50 3 Q. You agree that they're a two-dimensional
02:50 4 pattern, correct?

02:50 5 A. No. They're random.

02:51 6 Q. You agree it's two-dimensionally laid out,
02:51 7 correct?

02:51 8 A. My understanding of the word "two-dimensional"
02:51 9 means having two dimensions or axes like XY.

02:51 10 Q. Do you know how those light-deflecting
02:51 11 elements, or microstructures as they are called
02:51 12 sometimes, are made, sir?

02:51 13 A. I would imagine that a random number generator
02:51 14 is involved in their placement.

02:51 15 Q. They're made by a precise laser machine,
02:51 16 correct, sir?

02:51 17 A. That was my belief when I first saw their
02:51 18 structures is that a laser produced them. Yes.

02:51 19 Q. And when that laser produces them, it does so
02:51 20 according to a particular design file, correct?

02:51 21 A. I don't know that.

02:51 22 Q. Did you ask to speak to the panel
02:51 23 manufacturers in this case to understand what that
02:51 24 design file might say?

02:51 25 A. I did not have access to the design

02:52 1 manufacturers.

02:52 2 Q. Did you ask?

02:52 3 A. I did, actually.

02:52 4 Q. And you were told no?

02:52 5 A. I was told they're -- this is a while
02:52 6 ago -- that they were not accessible to me.

02:52 7 MR. MCCARTY: Can we go to Slide 11,
02:52 8 please, sir?

02:52 9 BY MR. MCCARTY:

02:52 10 Q. Now, we saw this earlier with Mr. Credelle.
02:52 11 When you look under a microscope at those panels,
02:52 12 you'll see a serial number of the particular pattern,
02:52 13 correct, sir?

02:52 14 A. I don't know what those numbers mean.

02:52 15 Q. We can flip it and you can mirror it.

02:52 16 You can see that P32 was the serial number
02:52 17 associated with the panel in the PG32UQ that we saw
02:52 18 with Mr. Credelle yesterday during his testimony.

02:52 19 You were in court, correct?

02:52 20 A. I see the numbers, yes, the letters,
02:52 21 numbering.

02:52 22 Q. And it was his testimony that that relates to
02:53 23 the particular design that's imposed on that light
02:53 24 guide plate using those structures, correct, sir?

02:53 25 A. I heard that testimony.

02:53 1 Q. If we zoom in on those
02:53 2 microstructures -- let's just take these on the left
02:53 3 and the right from this picture that we did
02:53 4 with -- live in the courtroom with Mr. Credelle. On
02:53 5 the left, sir, is PG32UQ, product 1, and on the right
02:53 6 is PG32UQ, product 2?

02:53 7 MR. BURESH: Your Honor, we've not seen
02:53 8 this slide nor has this been admitted into evidence. I
02:53 9 don't know what this is.

02:53 10 THE COURT: Have you presented this slide
02:53 11 to them?

02:53 12 MR. MCCARTY: This is a cross-examination
02:53 13 slide. I'm happy to give him a copy.

02:53 14 THE COURT: I know. Have you -- can you
02:53 15 identify what it is?

02:53 16 MR. MCCARTY: This is the picture that we
02:53 17 did in court yesterday with Mr. Credelle who's sitting
02:53 18 right there. He cross-examined Mr. Credelle on his
02:53 19 picture.

02:53 20 MR. BURESH: There was literally no
02:53 21 picture done in court yesterday.

02:54 22 MR. MCCARTY: Yes, it is, right here. We
02:54 23 just did it. We just zoomed in on it.

02:54 24 He cross-examined our witness on this
02:54 25 picture.

02:54 1 THE COURT: The objection's overruled.

02:54 2 BY MR. MCCARTY:

02:54 3 Q. Now, the product on the left, product on the
02:54 4 right, PG32UQ, that's the product at issue in this
02:54 5 case, one of the representative products, correct?

02:54 6 A. Are you saying -- I don't know what you're
02:54 7 saying here. These are micrographs taken in court
02:54 8 yesterday?

02:54 9 Q. Yes.

02:54 10 A. Sir, I don't believe that was possible with
02:54 11 that microscope you had.

02:54 12 Q. Okay. Well, if you bring them together, sir,
02:54 13 you'll see that the pattern on the left, the pattern on
02:54 14 the right matches, correct, sir?

02:54 15 A. I don't even know what they're photographs of.
02:54 16 So I'd have to perform an analysis to determine what
02:54 17 this means.

02:54 18 Q. Because you didn't show the jury any of these
02:54 19 sorts of analyses, tests, or images, correct, sir?

02:54 20 A. Again, my role here was to rebut --

02:54 21 THE COURT: Doctor, Doctor, just answer
02:54 22 his question, please.

02:54 23 A. No. I relied upon Mr. Credelle's images from
02:55 24 his report because I agreed with what was in his
02:55 25 report.

02:55 1 BY MR. MCCARTY:

02:55 2 Q. That's not the only predetermined claim
02:55 3 element that you're disputing, correct, sir?

02:55 4 A. Say again. I'm sorry?

02:55 5 Q. What patent talks about predetermined in this
02:55 6 case?

02:55 7 A. The '342 and the '562 patents.

02:55 8 Q. To be certain, the claim element that we're
02:55 9 looking at in the '342 is Claim 1, correct, sir?

02:55 10 A. Yes.

02:55 11 Q. And that element in Claim 1 is that: At least
02:55 12 one of said plurality of light-deflecting elements is
02:55 13 in predetermined alignment with respect to at least one
02:55 14 of said elongated cylindrical lenses.

02:55 15 Correct, sir?

02:55 16 A. That's the claim element, yes.

02:55 17 Q. So there has to be at least one, correct, sir?

02:55 18 A. Yes.

02:55 19 Q. It is your opinion that the claim is not met
02:55 20 because there is no predetermined alignment, correct,
02:55 21 sir?

02:55 22 A. It is my opinion that they are not in
02:56 23 alignment, period.

02:56 24 Q. This is your slide that you just presented,
02:56 25 correct, sir?

02:56 1 A. That's showing the figure from the patent.

02:56 2 Q. When you showed the jury these redlines, were
02:56 3 you trying to suggest that there must be an exact match
02:56 4 between all the microstructures on the bottom surface
02:56 5 and all the focal points on the lenses at top?

02:56 6 A. I'm just showing the figure shows an example
02:56 7 of what the claim says, which is the alignment.

02:56 8 Q. So you weren't trying to suggest that the
02:56 9 microstructures on the bottom have to be perfectly
02:56 10 aligned with the focal points on top?

02:56 11 A. I was just showing that the figure shows the
02:56 12 alignment required in the claim.

02:56 13 Q. So you think this figure is a limitation of
02:56 14 the claim, sir?

02:56 15 A. No. It's an example.

02:56 16 Q. Exactly. These patents are highly detailed,
02:56 17 correct, sir?

02:56 18 A. They have some detail. Yes.

02:56 19 Q. Pages and pages of disclosure?

02:56 20 A. Yes.

02:57 21 Q. Did you read the whole patent, sir?

02:57 22 A. Yes.

02:57 23 Q. Okay. Because if we get all the way to
02:57 24 Column 47, there's disclosure that talks about these
02:57 25 figures, including Figure 27 and the alignment.

02:57 1 Have you read that, sir?

02:57 2 A. Yes.

02:57 3 Q. Do you see where it talks about the prismatic
02:57 4 grooves which are 14 and the lenses which are 6, sir?

02:57 5 A. Yes.

02:57 6 Q. And you understand that the section here is
02:57 7 saying that they are -- can be highly collimated.

02:57 8 Do you see that, sir?

02:57 9 A. Yes.

02:57 10 Q. And if you keep reading, it says: However,
02:57 11 this invention is not limited to this configuration and
02:57 12 can also be implemented so that the optical axis of
02:57 13 each individual prismatic groove is slightly offset
02:57 14 with respect to an optical axis of the matching lens.

02:57 15 Did I read that correctly, sir?

02:58 16 A. Yes. In that example, there's still a
02:58 17 correspondence between the deflecting element and the
02:58 18 lens.

02:58 19 Q. Furthermore, it goes on, the amount of the
02:58 20 offset can be varied for different prism lens pairs
02:58 21 over the length of a waveguide.

02:58 22 Do you see that, sir?

02:58 23 A. Yes.

02:58 24 Q. Particularly they can be positioned and
02:58 25 aligned in accordance to a preselected ordered or

02:58 1 randomized pattern.

02:58 2 Did I read that correctly, sir?

02:58 3 A. That's what it says. Yes.

02:58 4 Q. So this patent disclosure specifically states
02:58 5 that a randomized pattern of microstructures can be
02:58 6 aligned with lenses?

02:58 7 A. I'm not sure I would interpret it that way.

02:58 8 Q. We all know that lenses can be aligned with
02:58 9 one another, and they can be aligned with
02:58 10 microstructures in the products, correct, sir?

02:58 11 A. In the product, the light guide plate is like
02:59 12 what I'm showing with my hands here, and the deflecting
02:59 13 elements are down here and the lenses are up here. And
02:59 14 in terms of relative dimensions, there's an enormous
02:59 15 distance between the deflecting elements and the lenses
02:59 16 so that each deflecting elements hits many lenses and
02:59 17 each lens gets light from many deflecting elements. So
02:59 18 there's no one-to-one correspondence. There's no
02:59 19 alignment at all.

02:59 20 Q. Now, that patent disclosure we read was from
02:59 21 the '342 patent, correct?

02:59 22 A. I believe so. Yes.

02:59 23 Q. And the -- as you said, the '342 patent and
02:59 24 the '562 have the exact same specification because
02:59 25 they're family members and continuations of one

02:59 1 another, right?

02:59 2 A. Yes.

02:59 3 Q. So that same passage we just went through is

02:59 4 in both of those patents, correct?

02:59 5 A. Correct.

02:59 6 Q. Both of these patents, correct?

02:59 7 A. Correct.

02:59 8 Q. And these are the two patents that you've been

02:59 9 calling light-collimating patents, correct?

02:59 10 A. Yes.

02:59 11 Q. You were here this morning and heard ASUSTeK's

03:00 12 corporate representative admit that collimated light

03:00 13 from the backlight does not cause an undesirable

03:00 14 viewing angle.

03:00 15 Did you hear that testimony?

03:00 16 A. Say it again, I'm sorry.

03:00 17 Q. Did you hear the testimony from Mr. Lee

03:00 18 acknowledging that collimated backlight does not cause

03:00 19 an undesirable viewing angle?

03:00 20 A. I'm not sure what you're referring to.

03:00 21 Q. In this slide it's supposedly depicting what

03:00 22 you say is a narrow viewing angle, correct?

03:00 23 A. That's what collimated light is.

03:00 24 Q. Do you remember where we left off in that

03:00 25 disclosure of the patents on Column 47?

03:00 1 A. Yes.

03:00 2 Q. Let's go back.

03:00 3 It continues: This can be useful, for
03:00 4 example, to create a nonparallel yet collimated beam
03:00 5 with a desired angular spread.

03:00 6 Do you see that, sir? Did I read that
03:00 7 correctly?

03:00 8 A. I see it. It doesn't make any sense.

03:01 9 Q. A collimated beam with a desired angular
03:01 10 spread, including in the products a back reflector,
03:01 11 light guide plate, quantum dot film, BEF sheet,
03:01 12 diffuser film, glass, and TFT to create the viewing
03:01 13 angle, correct, sir?

03:01 14 A. If I may, collimated light is defined as
03:01 15 parallel light.

03:01 16 Q. Sir.

03:01 17 A. So the passage doesn't make any sense to me.

03:01 18 Q. My question was: In the products, there's
03:01 19 back reflector, light guide plates, some quantum dot
03:01 20 films in some of the products, BEF sheets, diffuser
03:01 21 films, glass, thin film transistors, correct, sir?

03:01 22 A. Yes. I mean, so --

03:01 23 THE COURT: Doctor, Doctor.

03:01 24 A. -- if you're asking --

03:01 25 THE COURT: Doctor.

1 THE WITNESS: Oh, sorry.

03:01 2 THE COURT: Answer his question directly.

03:01 3 Your lawyer will have an opportunity. If he wants to

03:02 4 let you explain more, he can. If he doesn't, your

03:02 5 lawyer will be able to --

03:02 6 THE WITNESS: I thought he wanted an

03:02 7 explanation. I'm sorry.

03:02 8 THE COURT: I doubt he does. I'd be

03:02 9 surprised if he does. I think he's happy with just

03:02 10 your answer.

03:02 11 A. What was the question? I'm sorry.

03:02 12 BY MR. MCCARTY:

03:02 13 Q. The question was: In your clip art picture,

03:02 14 what you left off is the back reflector, the light

03:02 15 guide plate, the quantum dot film, the BEF sheet, the

03:02 16 diffuser film -- the diffuser film, the glass, the TFT

03:02 17 that create that viewing angle as a system, correct,

03:02 18 sir?

03:02 19 A. Not all those elements are involved in

03:02 20 redistributing the light.

03:02 21 Q. And these are 99 percent of the patents in the

03:02 22 case -- strike that.

03:02 23 These are 99 percent of the products in the

03:02 24 case, correct, sir?

03:02 25 A. The different sheets, you mean?

03:02 1 Q. The products that are applicable to the '562
03:02 2 and the '342 patents, those represent 99 percent of the
03:03 3 products at issue in this case, correct, sir?

03:03 4 A. I believe 99 percent of the accused products
03:03 5 are accused of those two patents. Yes.

03:03 6 Q. Now, these other two patents, the '318 and the
03:03 7 '089, relate to a very small subset of products that
03:03 8 have quantum dots in them, correct?

03:03 9 A. I believe so. Yes.

03:03 10 Q. If we looked at the list of accused products
03:03 11 in the stipulation, there's, I think, four for one of
03:03 12 the patents and five for the other.

03:03 13 Does that sound right?

03:03 14 A. Yes. Quantum dots do not appear in the other
03:03 15 two patents, only in the '089 patent. So only that
03:03 16 applies to the quantum dot enhancement film products.

03:03 17 Q. And these patents are what you've labeled as
03:03 18 light-trapping patents to reflect some of the
03:03 19 disclosure in the specification, correct?

03:03 20 A. To reflect pretty much all the disclosure.

03:04 21 Q. And light trapping is not a claim term,
03:04 22 correct, sir?

03:04 23 A. It is not.

03:04 24 Q. Now, for Claim 3 of the patent, which relies
03:04 25 on Claim 1, you've presented this slide, correct, sir?

03:04 1 A. Yes.

03:04 2 Q. Okay. On your slide here, you've identified
03:04 3 the first claim element, which includes the term
03:04 4 "broad-area light input surface."

03:04 5 Do you see that?

03:04 6 A. Yes.

03:04 7 Q. And it's your opinion that the bottom surface
03:04 8 of the light guide cannot be that light input surface,
03:04 9 correct, sir?

03:04 10 A. It's my opinion that the light input surface
03:04 11 is where light goes in.

03:04 12 Q. You're saying there's no light that goes in
03:04 13 the bottom of this surface, sir?

03:04 14 A. I'm saying based upon the prevailing direction
03:04 15 of light -- or flow of light, the light input surface
03:04 16 is the edge.

03:04 17 Q. Your graphic is missing something, isn't it,
03:04 18 sir?

03:04 19 A. Which?

03:04 20 Q. This graphic, this picture, is missing
03:04 21 something, isn't it, sir?

03:04 22 A. I guess you're going to tell me.

03:05 23 Q. It's missing a reflector sheet, isn't it, sir?

03:05 24 A. It's not showing the reflector sheet.

03:05 25 Q. The purpose of that reflector sheet is to

03:05 1 reflect the light back through the broad-area surface
03:05 2 that you say cannot be the light input surface,
03:05 3 correct, sir?

03:05 4 A. So my understanding of the argument is that
03:05 5 he's saying that because 50 percent of the --

03:05 6 THE COURT: Doctor, you need to answer
03:05 7 his question directly, and if you're unable to, let him
03:05 8 know and he'll try again.

03:05 9 A. Say -- I wasn't sure what the question was.
03:05 10 BY MR. MCCARTY:

03:05 11 Q. The systems are designed with a reflector
03:05 12 sheet in the back, correct, sir?

03:05 13 A. The products have a back reflector sheet.
03:05 14 Yes.

03:05 15 Q. And that reflector sheet reflects almost
03:05 16 50 percent of the light back through that back surface,
03:05 17 correct, sir?

03:05 18 A. Yes. And 100 percent goes in through the
03:05 19 edge.

03:05 20 Q. You agree that a product infringes a claim if
03:05 21 it is reasonably capable of satisfying the claim
03:05 22 elements, correct, sir?

03:06 23 A. My understanding of this process is that it's
03:06 24 based upon what's called a preponderance of the
03:06 25 evidence, which means what is more likely than not.

03:06 1 MR. MCCARTY: Objection, nonresponsive.

03:06 2 THE COURT: Sustained.

03:06 3 BY MR. MCCARTY:

03:06 4 Q. Please listen to my question, sir.

03:06 5 You agree that an accused product infringes a
03:06 6 claim if it is reasonably capable of satisfying the
03:06 7 claim elements, correct?

03:06 8 A. I believe that you have to understand the
03:06 9 claim in order to identify what elements of the product
03:06 10 you think meet the claim limitation.

03:06 11 MR. MCCARTY: Objection, nonresponsive.

03:06 12 THE COURT: Sustained.

03:06 13 BY MR. MCCARTY:

03:06 14 Q. I'm going to try not to waste the jury's time,
03:06 15 but I need you to answer my question, sir.

03:06 16 You agree that an accused product infringes a
03:06 17 claim if it is reasonably capable of satisfying the
03:06 18 claim elements, right?

03:07 19 A. If the product element matches the claim
03:07 20 element, it infringes the claim. Yes.

03:07 21 Q. Sir, please turn in your binder to your own
03:07 22 expert report in Tab 1. Please go to Paragraph 22 of
03:07 23 your expert report.

03:07 24 I'll ask you again. An accused product
03:07 25 infringes a claim if it is reasonably capable of

03:07 1 satisfying the claim elements, correct, sir?

03:07 2 A. Yes. If it is reasonably capable.

03:07 3 Q. Reasonably capable. Correct, sir.

03:07 4 A. Yes.

03:07 5 Q. So the ASUSTeK monitors infringe the claims in
03:07 6 this case if they are reasonably capable of satisfying
03:07 7 the claims, correct?

03:07 8 A. That's what it says. Yes.

03:08 9 Q. The back of the light guide plate is
03:08 10 reasonably capable of receiving almost 50 percent of
03:08 11 the light off the back reflector sheet, correct, sir?

03:08 12 A. Well, it does receive 50 percent of the light.

03:08 13 Q. When the light reflects off the back reflector
03:08 14 sheet, where does it go?

03:08 15 A. It goes back into the light guide plate.

03:08 16 Q. Into that broad-area surface, correct, sir?

03:08 17 A. Yes.

03:08 18 Q. An accused product infringes a patent claim
03:08 19 even if such product contains additional elements that
03:08 20 are not recited in the claim, correct, sir?

03:08 21 A. That's true.

03:08 22 Q. So if a claim requires one broad-area light
03:08 23 input surface and the product has two input surfaces,
03:08 24 that does not mean the product doesn't infringe,
03:08 25 correct, sir?

03:08 1 A. If a surface can be reasonably taken to be an
03:09 2 input surface different than the actual input surface,
03:09 3 I agree. But the key word there is "reasonably,"
03:09 4 right? We have to apply reason.

03:09 5 Q. If the claim requires one surface and the
03:09 6 product has two surfaces, that fact alone does not mean
03:09 7 the product does not infringe, correct, sir?

03:09 8 A. If there were a second input surface, it would
03:09 9 still infringe the claim.

03:09 10 Q. Sir, I want to touch base on this issue of
03:09 11 quantum dots.

03:09 12 You recall discussing quantum dots?

03:09 13 A. Yes.

03:09 14 Q. To be clear, you've never argued that the
03:09 15 quantum dots in the accused products do not meet the
03:09 16 claimed quantum dot element in the -- in the patent,
03:09 17 correct, sir?

03:09 18 A. No.

03:09 19 Q. You've never even made that argument, right?

03:10 20 A. In my report about quantum dots?

03:10 21 Q. Yes.

03:10 22 A. Well, I discussed light harvesting and light
03:10 23 converting.

03:10 24 Q. Which we've already determined are not claim
03:10 25 limitations that the jury is to consider, correct?

03:10 1 A. Correct.

03:10 2 Q. Okay. I want to briefly discuss your actual
03:10 3 noninfringement position regarding the '089 patent
03:10 4 which relates to the claim element two-dimensional
03:10 5 array of optical elements and a photoresponsive layer.
03:10 6 Are you with me?

03:10 7 A. Yes.

03:10 8 Q. We agree that the accused products have a
03:10 9 photoresponsive layer, correct?

03:10 10 A. As identified, that's Dr. Credelle's opinion.
03:10 11 I don't agree with that.

03:10 12 Q. That's the quantum dot film, correct, sir?

03:10 13 A. Yes. And I don't agree with his opinion that
03:11 14 that meets the claim, but that's not part of my
03:11 15 discussion here.

03:11 16 Q. Correct, sir.

03:11 17 And you also agree with me that the accused
03:11 18 products have a two-dimensional array of optical
03:11 19 elements.

03:11 20 You don't dispute that, do you, sir?

03:11 21 A. Actually, I had some difficulty with this
03:11 22 because the product actually has a one-dimensional
03:11 23 array of optical elements.

03:11 24 Q. Sir --

03:11 25 A. But I didn't discuss that as an infringement

03:11 1 point -- noninfringement point.

03:11 2 Q. To be clear, those are lenses in the products
03:11 3 that you've identified in yellow, correct, sir?

03:11 4 A. They have a curved surface, and so they can
03:11 5 perform as a lens. Yes. But they are not
03:11 6 two-dimensional.

03:11 7 Q. And those lenses are in an array across the
03:11 8 accused product area, correct, sir?

03:11 9 A. They are in a one-dimensional array.

03:11 10 Q. Now, when you opined on noninfringement to the
03:11 11 jury, you underlined "over," but you missed the rest of
03:12 12 the story which says "over an area."

03:12 13 Do you see that, sir?

03:12 14 A. I see it. Yes.

03:12 15 Q. You understand what an area is, don't you,
03:12 16 sir?

03:12 17 A. Yes. I mean, it's like if I'm flying over the
03:12 18 area in Nevada, I'm over it.

03:12 19 Q. Area is length times width.

03:12 20 Do you understand that, sir?

03:12 21 A. Sure.

03:12 22 Q. My daughter is in elementary school, and I
03:12 23 think she would get that.

03:12 24 Length times width is the area, and this claim
03:12 25 is stating that the optical elements, the lenses are

03:12 1 distributed over an area.

03:12 2 Do you see that, sir?

03:12 3 A. Yes. They're over an area. Yes.

03:12 4 Q. And the area it has to be over is defined by
03:12 5 the quantum dot film, correct, sir?

03:12 6 A. Yes. They have to be over -- in Credelle's
03:13 7 infringement theory, they have to be over the
03:13 8 photoresponsive layer.

03:13 9 Q. For the record, I'm holding, for the
03:13 10 representative product, the photoresponsive layer which
03:13 11 is quantum dot film. And for the record, I'm holding a
03:13 12 light guide plate with the lenses.

03:13 13 A. Yes.

03:13 14 Q. Are you with me?

03:13 15 A. Yes.

03:13 16 Q. Okay. And in a monitor sitting on a table,
03:13 17 it'd be situated something like this, correct, sir?

03:13 18 A. Yes.

03:13 19 Q. And it's your opinion that when you tip it on
03:13 20 its back like this, it's not infringing, correct, sir?

03:13 21 A. No. My opinion is that the claim requires a
03:13 22 geometric coordination where there's an implied
03:13 23 coordinate system or direction of what is under and
03:13 24 what is over. The reflector is under; the lenses are
03:14 25 over.

03:14 1 Q. Geometry includes area, length times width,
03:14 2 right, sir?

03:14 3 A. Area. Yes.

03:14 4 Q. Is there any area of this quantum dot film
03:14 5 that's not over the lenses and vice versa when you hold
03:14 6 it like this?

03:14 7 A. Well, the way you hold it, they're neither
03:14 8 over or under; they're side by side.

03:14 9 Q. If you hold it like this, do you still think
03:14 10 it infringes?

03:14 11 A. Sir, what I have said is that the claim
03:14 12 requires a certain geometric arrangement so that the
03:14 13 optic elements can inject light into the
03:14 14 photoresponsive layer, and I explained how Credelle's
03:14 15 mapping is inconsistent with that result.

03:15 16 MR. MCCARTY: Sorry. I'm almost there.
03:15 17 Just a couple more.

03:15 18 Mr. Diaz, could I get the ELMO?

03:15 19 BY MR. MCCARTY:

03:15 20 Q. And we talked about how in your direct
03:15 21 testimony, I think over half of your slides were
03:15 22 talking about light trapping and light harvesting and
03:15 23 solar energy, things like that?

03:15 24 A. I felt I was supposed to explain the patents
03:15 25 to the jury.

03:15 1 Q. And I want to get a -- kind of a checklist
03:16 2 here of what the patents relate to and understand where
03:16 3 you're at on this so we can understand your opinion a
03:16 4 little bit better. Okay, sir?

03:16 5 A. Sure.

03:16 6 Q. Now, my client says the patents, of course,
03:16 7 relate to backlights and displays.

03:16 8 Do you understand that?

03:16 9 A. That's the accusation here, yes.

03:16 10 Q. My client's SVV, correct, sir?

03:16 11 A. Yes.

03:16 12 Q. And the inventor of the patents, Dr. Vasylyev,
03:16 13 agrees with that too.

03:16 14 You were here for his testimony, correct, sir?

03:16 15 A. Yes. He claimed to invented backlights.

03:16 16 Q. Claimed to have invented backlights, sir?

03:16 17 A. Well, he claims to -- since 2009 to have
03:16 18 invented backlights.

03:16 19 Q. You think that my client's in here saying he
03:16 20 invented backlights?

03:16 21 A. I withdraw that statement.

03:17 22 Q. And you heard the testimony of Tom Credelle,
03:17 23 one of the foremost experts on LCD displays, and he
03:17 24 agrees that the patents relate to backlights and
03:17 25 displays.

03:17 1 Do you understand that?

03:17 2 A. That's his assertion, yes.

03:17 3 Q. Now, we've been through three days of trial.
03:17 4 We've heard lots of arguments. Is it fair to say that
03:17 5 ASUSTeK's lawyers are on the other side of this ledger?

03:17 6 THE WITNESS: Can I talk?

03:17 7 A. I mean, you're asking for a comparison here,
03:17 8 and how I would draw that comparison is how many times
03:17 9 the word "solar" versus "backlights" appears in the
03:17 10 patents. And it's about -- it must be hundreds to one.
03:17 11 BY MR. MCCARTY:

03:17 12 Q. Sir, you understand that there's a damages
03:17 13 expert in the case, and you've spoken to him, correct?

03:17 14 A. You mean on ASUS' side?

03:17 15 Q. Yes, sir.

03:17 16 A. I have spoken to him, yes.

03:17 17 Q. And there's reliance by him on you in his
03:18 18 report, correct? We're going to hear from him later
03:18 19 today.

03:18 20 A. I think he relies upon my technical guidance,
03:18 21 yes.

03:18 22 Q. Okay. And he says that it's his understanding
03:18 23 that the patents in this suit generally relate to
03:18 24 backlighting configurations and backlighting design and
03:18 25 light guides.

03:18 1 Do you understand that, sir?

03:18 2 A. I guess I would have to understand what he
03:18 3 bases that on.

03:18 4 Q. He's going to come testify. And he relies on
03:18 5 another expert in the case, Dr. Coleman, for that
03:18 6 statement that they relate to backlighting and light
03:18 7 guides.

03:18 8 Do you understand that?

03:18 9 MR. BURESH: Your Honor, objection. He's
03:18 10 still talking about other experts.

03:18 11 THE COURT: I was assuming he was talking
03:18 12 about someone that was going to appear.

03:18 13 MR. BURESH: What's that?

03:18 14 THE COURT: I was assuming he was talking
03:18 15 about someone that's going to appear here.

03:18 16 MR. BURESH: Maybe I misheard the
03:19 17 question.

03:19 18 Your Honor, I apologize. I misheard.
03:19 19 Please proceed.

03:19 20 BY MR. MCCARTY:

03:19 21 Q. And we just heard testimony of Mr. Lee from
03:19 22 ASUSTeK, and you sat in the courtroom for that one,
03:19 23 correct, sir?

03:19 24 A. Yes.

03:19 25 MR. MCCARTY: Mr. Diaz, can I get

03:19 1 Slide 7?

03:19 2 BY MR. MCCARTY:

03:19 3 Q. And the question was: And you know they
03:19 4 relate to the backlight unit portion of the monitor,
03:19 5 correct?

03:19 6 And we're talking about the patents.

03:19 7 You see that question, sir?

03:19 8 A. Yes.

03:19 9 Q. And ASUSTeK's corporate representative says:
03:19 10 Yes.

03:19 11 And that's Mr. Lee, right, sir?

03:19 12 A. That's his testimony. I mean, that may be
03:19 13 based upon other things I'm not aware of.

03:19 14 Q. Well, he tells you what it's based on. He
03:20 15 learned that the patents are related to backlight unit
03:20 16 portion of the monitor from the engineers at ASUSTeK.
03:20 17 He tells you right there, sir.

03:20 18 Do you remember that testimony?

03:20 19 A. Yes.

03:20 20 Q. Okay. What side are you on?

03:20 21 A. What side?

03:20 22 Q. Yes, sir.

03:20 23 A. The truth.

03:20 24 Q. SVV, Dr. Vasylyev, Tom Credelle, Mr. Ferioli,
03:20 25 Dr. Coleman, Mr. Lee, and ASUS engineers are on record

03:20 1 saying the patents relate to backlights and displays.

03:20 2 Do you agree with all of them or do you

03:20 3 disagree with them, sir?

03:20 4 A. I went through the patents in great detail,

03:20 5 and there's very little reference to backlights. In

03:20 6 fact, I think it appears only one time in the same

03:21 7 specification which is in the '342 and '562 patents.

03:21 8 Q. Are you on the side of the patents are limited

03:21 9 to only solar energy embodiments, sir?

03:21 10 A. Not only.

03:21 11 Q. They're not limited to solar embodiments,

03:21 12 correct, sir?

03:21 13 A. I believe the '089 and the '318 patents only

03:21 14 show solar embodiments.

03:21 15 Q. My question is: Are the patent claims at

03:21 16 issue in this case limited only to solar embodiments

03:21 17 described in the patent specification, in your opinion,

03:21 18 sir?

03:21 19 A. I apologize. The first time I thought you

03:21 20 said the patents' descriptions. The claims have to be

03:21 21 understood in terms of what is written in the patent

03:21 22 description, and I've explained my noninfringement

03:21 23 arguments.

03:21 24 Q. Sir, is it your opinion that the patent claims

03:21 25 at issue in this case are limited to only solar

03:22 1 embodiment applications? Yes or no?

03:22 2 A. I haven't presented that opinion. I presented
03:22 3 a noninfringement opinion.

03:22 4 Q. Sounds like you're on the fence, Dr. Goossen.

03:22 5 Sir, you've been listening to the testimony of
03:22 6 this trial over the last couple of days, correct, sir?

03:22 7 A. Yes. I've been here.

03:22 8 Q. You've been in the courtroom this whole time?

03:22 9 A. Just about the whole time.

03:22 10 Q. So you were in the courtroom when ASUS'
03:22 11 counsel yesterday was asking Dr. Farber about models
03:22 12 that Samsung had used in Samsung displays that might
03:22 13 use SVV's technology.

03:22 14 Do you recall that?

03:22 15 A. I believe so. Yes.

03:22 16 Q. Okay. Now, you're a technical expert who we
03:22 17 established can actually analyze products. You could
03:23 18 cut them open in the lab, take pictures, run tests,
03:23 19 correct, sir?

03:23 20 A. I have done that. Yes.

03:23 21 Q. You didn't show any to the jury in this case?

03:23 22 A. Again, I didn't dispute what was shown in
03:23 23 Credelle's report. And so I just used those.

03:23 24 Q. You know that to determine whether a product
03:23 25 is using SVV's technology, you can go through a process

03:23 1 called a teardown to study the films, the lighting, the
03:23 2 lighting panel, the components, correct?

03:23 3 A. Yes.

03:23 4 Q. Okay. And you heard Dr. Farber, our damages
03:23 5 economist, testify that he confirmed nearly 100
03:23 6 different ASUS products were using the technology,
03:23 7 correct, sir?

03:23 8 A. Are alleged to use the technology.

03:23 9 Q. And you're aware that Dr. Vasylyev, who is
03:23 10 also someone who can cut open the products, study the
03:23 11 films, run the tests, testified that he could find his
03:24 12 technology in just seven Samsung products.

03:24 13 Do you recall that testimony?

03:24 14 A. I don't actually, but okay.

03:24 15 Q. Prior to October 10th, 2023, how many Samsung
03:24 16 products did you purchase and analyze to see if SVV's
03:24 17 technology was in them?

03:24 18 A. I only tore apart ASUS products.

03:24 19 Q. You were the witness hired in this case to do
03:24 20 technical analysis for ASUS, correct?

03:24 21 A. I am the noninfringement expert. Yes.

03:24 22 MR. MCCARTY: Mr. Diaz, can I go through
03:24 23 Slide 36?

24 BY MR. MCCARTY:

03:24 25 Q. Last thing. Were you here when they were

03:24 1 asking Dr. Farber about shopping for apples?

03:24 2 A. Yeah. I saw that.

03:24 3 Q. You know what that was about?

03:24 4 A. I don't do the grocery shopping.

03:24 5 Q. Well, there was about ten minutes talking
03:24 6 about apple shopping.

03:24 7 Do you recall that there was ten minutes about
03:24 8 apple shopping?

03:24 9 A. I heard about apples, yeah.

03:24 10 Q. So let's say you have a bag of apples. Let's
03:25 11 say you have a bag of Samsungs, seven Samsungs, in
03:25 12 fact.

03:25 13 To be clear, you were here for Dr. Vasylyev's
03:25 14 testimony where he confirmed that like he did with
03:25 15 ASUSTeK, he sourced the monitors, he cut them open, and
03:25 16 he studied them, correct, sir?

03:25 17 A. Okay.

03:25 18 Q. So you have another bag full of ASUSs, 91
03:25 19 ASUSs to be specific.

03:25 20 Do you see that, sir?

03:25 21 A. Yes.

03:25 22 Q. You understand there's 91 different models
03:25 23 that we allege have SVV's technology in them in this
03:25 24 case?

03:25 25 A. I believe that's the number that's been

03:25 1 accused. Yes.

03:25 2 Q. Now, if ASUS wants to say that there are more
03:25 3 Samsung models with SVV's technology in them, they'd
03:25 4 have to cut them open and look, right, sir?

03:25 5 A. I guess the only way to determine if the
03:25 6 accusations can even possibly be true, you have to tear
03:26 7 apart the device. Yes.

03:26 8 Q. And you're the witness with that expertise on
03:26 9 ASUSTeK's side, correct, sir?

03:26 10 A. Yes. And I took apart many ASUS monitors.

03:26 11 Q. You took apart no Samsung monitors, correct,
03:26 12 sir?

03:26 13 A. I didn't know I was supposed to.

03:26 14 MR. MCCARTY: No further questions.

03:26 15 REDIRECT EXAMINATION

03:26 16 BY MR. BURESH:

03:26 17 Q. Just a couple things to clarify, Dr. Goossen.

03:26 18 A. Yes.

03:26 19 Q. You tore down a bunch of ASUS products?

03:26 20 A. Yes.

03:26 21 Q. And inspected them in your laboratory?

03:26 22 A. I inspected them at home.

03:26 23 Q. Okay. Took pictures of them?

03:26 24 A. Yes.

03:26 25 Q. But you used Dr. Credelle's pictures for your

03:26 1 testimony today?

03:26 2 A. Yes. I saw the same things as shown in his
03:26 3 photographs.

03:26 4 Q. So there's no dispute over the photographs?

03:26 5 A. No.

03:26 6 Q. Does it make the jury's job easier if
03:26 7 everybody just talks about the same set of pictures?

03:26 8 A. I would think so.

03:27 9 Q. Yeah.

03:27 10 One other thing I was just curious about. I
03:27 11 don't spend a ton of time in a lab. But yesterday, one
03:27 12 of the counsel for SVV, whoever was doing
03:27 13 Mr. Credelle's direct examination -- I apologize; I
03:27 14 forget -- but there was a small microscope that was
03:27 15 used to zoom in on a model number from one of the
03:27 16 plates in one of the products.

03:27 17 Do you recall that?

03:27 18 A. Yes.

03:27 19 Q. And just looked at one, right?

03:27 20 A. As far as I know, yes.

03:27 21 Q. Did you get a look at that microscope?

03:27 22 A. I saw it from the back there. Yes.

03:27 23 Q. Do you think that microscope could have taken
03:27 24 the picture we saw earlier today?

03:27 25 A. Absolutely not.

03:27 1 Q. It wouldn't have that level of clarity, right?

03:27 2 A. Force or magnification. There's no way.

03:28 3 Q. So Mr. McCarty said that they took two
03:28 4 pictures of two different guide plates in court
03:28 5 yesterday.

03:28 6 A. That cannot be.

03:28 7 Q. Do you think that's even possible with the
03:28 8 tools that they had here?

03:28 9 A. I do not think so.

03:28 10 Q. Does the jury have any reason to trust the
03:28 11 veracity of what they just saw from Mr. McCarty that
03:28 12 was not done with the microscope here in court?

03:28 13 A. In my opinion, it's not evidence.

03:28 14 MR. BURESH: Nothing further, Your Honor.

03:28 15 RECROSS-EXAMINATION

03:28 16 BY MR. MCCARTY:

03:28 17 Q. What kind of microscope was in court
03:28 18 yesterday?

03:28 19 A. It looked like a small compound microscope.

03:28 20 Q. And you think that that microscope can't take
03:28 21 a picture of some dots on the side of a light guide
03:28 22 plate?

03:28 23 A. It only had one objective, and I doubt it had
03:28 24 sufficient magnification to take that image.

03:28 25 Q. And you never decided to take any pictures

03:28 1 yourself, correct, sir, show them to the jury?

03:28 2 A. Well, I have in my lab at home. Yes.

03:28 3 Q. And you didn't show the jury any pictures, did
03:29 4 you, sir?

03:29 5 A. Well, again, the pictures I took matched what
03:29 6 was in Mr. Credelle's report, and so I didn't dispute
03:29 7 the photographs in his report.

03:29 8 Q. You're disputing these photographs right now.

03:29 9 A. I don't -- I don't think they -- that that
03:29 10 microscope could have taken those images, sir.

03:29 11 Q. You could confirm or deny if you would have
03:29 12 just taken some pictures yourself.

03:29 13 A. I didn't bring my microscope.

03:29 14 MR. MCCARTY: No further questions.

03:29 15 MR. BURESH: Nothing further, Your Honor.

03:29 16 THE COURT: You may step down.

03:29 17 Ladies and gentleman of the jury, we're
03:29 18 going to take our afternoon recess now. Please
03:29 19 remember my instructions. And we'll be back in 10 or
03:29 20 15 minutes.

03:29 21 THE BAILIFF: All rise.

03:29 22 (Jury exited the courtroom.)

03:29 23 THE COURT: You may be seated.

03:29 24 The next witness will be damages?

03:30 25 MR. SIEGMUND: Yes, Your Honor.

03:30 1 THE COURT: And then who's after that?

03:30 2 MR. SIEGMUND: That's it, Your Honor.

03:30 3 THE COURT: Okay. And there's no

03:30 4 rebuttal?

03:30 5 MR. CALDWELL: There might be in view of

03:30 6 the recent accusation of lying. So there might be.

03:30 7 We're going to discuss it during the break.

03:30 8 MR. SIEGMUND: We don't have a validity

03:30 9 case. My understanding is there is no one.

03:30 10 THE COURT: Well, here's the deal: If

03:30 11 the plaintiff is able to show me that they can -- that

03:30 12 they have a witness that they can put on that will

03:30 13 rebut the insinuation that the expert just made,

03:30 14 that -- in essence that those slides were fabricated,

03:30 15 I'm going to let them put that on.

03:30 16 And so, you know, it was -- y'all chose

03:30 17 to -- the defendant chose to go out on that tightrope.

03:30 18 And maybe you're right. Maybe the microscope can't do

03:31 19 it. But if you're wrong, the jury's going to be

03:31 20 entitled to hear that -- how it was made. So...

03:31 21 MR. CALDWELL: Thank you.

03:31 22 (Recess taken.)

03:49 23 THE BAILIFF: All rise.

03:49 24 THE COURT: Please remain standing for

03:49 25 the jury.

03:49 1 (Jury entered the courtroom.)

03:49 2 THE COURT: Thank you. You may be
3 seated.

03:50 4 Counsel, you may call your next --

03:50 5 Mr. Siegmund, you may call your next witness, please.

03:50 6 MR. SIEGMUND: Yes, Your Honor.

03:50 7 Defendant calls James Ferioli.

03:50 8 (The witness was sworn.)

03:50 9 DIRECT EXAMINATION

03:50 10 BY MR. SIEGMUND:

03:51 11 Q. All right. Good afternoon, sir.

03:51 12 Can you please introduce yourself to the jury?

03:51 13 A. Good afternoon.

14 (Clarification by Reporter.)

03:51 15 A. Good afternoon. My name is James Ferioli.

03:51 16 BY MR. SIEGMUND:

03:51 17 Q. And please tell the jury a little bit about
03:51 18 yourself, sir.

03:51 19 A. Well, I'm an economist. I've been married
03:51 20 almost seven years now, and I'm principal at an
03:51 21 economic research and consulting company called
03:51 22 Micronomics.

03:51 23 Q. And why are you here today, sir?

03:51 24 A. Well, I've been asked to evaluate issues
03:51 25 concerning damages, and these include the opinions

03:51 1 provided by Dr. Farber to the jury.

03:51 2 Q. And did you prepare some slides to help walk
03:51 3 the jury through your testimony?

03:51 4 A. Yes. I did. And they're what you can see on
03:51 5 the screen.

03:51 6 Q. All right. Could you give us a run-through of
03:51 7 your educational background, please?

03:51 8 A. Sure. So I received my bachelor's for
03:52 9 economics from St. Mary's College of Maryland in 2011,
03:52 10 and I received my master's degree for international
03:52 11 economics and international management from the
03:52 12 University of San Diego in 2013.

03:52 13 Q. And after your master's, what did you do next?

03:52 14 A. Well, I joined Micronomics. It's the company
03:52 15 that I still work for today.

03:52 16 Q. And what do you do there?

03:52 17 A. At Micronomics, I'm an economist. It's
03:52 18 actually what I've done for my entire professional
03:52 19 career. And my work primarily focuses on the
03:52 20 evaluation of intellectual property and the assessment
03:52 21 of patent damages.

03:52 22 Q. How long have you been working as an economist
03:52 23 in cases like this?

03:52 24 A. I have been working on these types of cases
03:52 25 for more than a decade now.

03:52 1 Q. And have you testified before a jury before?

03:52 2 A. No. I haven't. As I said, I've been doing
03:52 3 this for a long time, but sitting here and speaking to
03:52 4 the jury like this, today will be the first time for
03:52 5 me.

03:52 6 MR. SIEGMUND: And, Your Honor, we'd
03:53 7 offer Mr. Ferioli as an expert on the valuation of
03:53 8 intellectual property and the calculation of patent
03:53 9 damages.

03:53 10 MR. PEARSON: No objection, Your Honor.

03:53 11 THE COURT: He'll be admitted as such.

03:53 12 BY MR. SIEGMUND:

03:53 13 Q. All right, sir. Have you been retained by the
03:53 14 defendant ASUSTeK in this case?

03:53 15 A. Yes. I have.

03:53 16 Q. And have you ever worked for ASUSTeK before?

03:53 17 A. No. I haven't.

03:53 18 Q. Does the fact that you're here discussing
03:53 19 damages say anything about the issue of infringement?

03:53 20 A. No. It doesn't.

03:53 21 Q. Are you an infringement expert?

03:53 22 A. No. I'm not.

03:53 23 Q. All right. And if the jury finds the patents
03:53 24 were not infringed, what does that mean for damages?

03:53 25 A. Well, if there's no infringement, then there's

03:53 1 no damages. It's really as simple as that.

03:53 2 Q. Okay. And speaking of infringement, are you
03:53 3 required to assume infringement just like Dr. Farber?

03:53 4 A. Yes. Dr. Farber and I both must assume that
03:53 5 the patents are valid and infringed. And so as I talk
03:53 6 to you today, you're going to hear me say things like
03:53 7 "ASUS using SVV's technology" or "the ASUS products
03:53 8 that use the technology." That's just our required
03:54 9 assumption.

03:54 10 Q. All right. Before we get into your opinions
03:54 11 here, what materials did you consider?

03:54 12 A. Well, I started with the documents provided by
03:54 13 the parties, and these included things like financial
03:54 14 data, license agreements, company presentations.

03:54 15 I also considered testimony by the
03:54 16 representatives of the parties. My staff and I
03:54 17 gathered publicly available information, and these
03:54 18 include things like industry data and market reports.

03:54 19 I considered the expert report of SVV's
03:54 20 damages expert, Dr. Farber. And I had conversations
03:54 21 with ASUS' technical experts.

03:54 22 Q. Have you been present throughout the courtroom
03:54 23 in trial?

03:54 24 A. Yes. I've had.

25 Q. And you heard --

03:54 1 A. Yes. I have.

03:54 2 Q. Sorry.

03:54 3 And you heard Dr. Farber testify as well?

03:54 4 A. Yes. I did.

03:54 5 Q. All right. And you heard him discuss the
03:54 6 hypothetical negotiation; is that right?

03:54 7 A. Yes. I did.

03:54 8 Q. And did you use the same hypothetical
03:54 9 negotiation structure as Dr. Farber?

03:54 10 A. Yes. We both used the same structure.

03:55 11 Q. All right. Now, are there any aspects of the
03:55 12 hypothetical negotiation that you believe are
03:55 13 particularly important in this case, sir?

03:55 14 A. Yes. And so it's the first one you see on
03:55 15 this slide in Row 1, and that's that the parties must
03:55 16 be reasonable.

03:55 17 And by this, I just mean they have to be
03:55 18 negotiating terms that are agreeable to the other side
03:55 19 because the parties have to find a position that both
03:55 20 sides are willing to accept.

03:55 21 Q. Okay. And Dr. Farber showed the big long list
03:55 22 of Georgia-Pacific factors. Are those the same things
03:55 23 that you considered as well?

03:55 24 A. Yes. I also considered all 15 factors, but my
03:55 25 testimony today will just focus on those that are most

03:55 1 important for my analysis.

03:55 2 Q. All right. So let's get into that.

03:55 3 Where did you begin your analysis, then, sir?

03:55 4 A. Well, I started with Factor No. 1, which
03:55 5 relates to real-world market transactions. And you can
03:55 6 see the formal definition of it here on this slide.
03:55 7 It's the rates received by the patentee for licensing
03:55 8 the patents-in-suit, proving or tending to prove an
03:55 9 established royalty.

03:55 10 Q. And why is this factor important?

03:56 11 A. Because this factor shows us what the
03:56 12 patentee, so SVV in this case, has actually received in
03:56 13 the real world in exchange for licensing its
03:56 14 technology.

03:56 15 Q. All right. So as an economist, how do you
03:56 16 assess these types of real-world transactions?

03:56 17 A. Well, I often use these as benchmarks to
03:56 18 calculate the value. And as you heard Dr. Farber say
03:56 19 yesterday, he's done the same thing in other cases, and
03:56 20 actually, to be honest, it's something we all do.

03:56 21 Think of when you're buying or renting a
03:56 22 house. When you're trying to decide what to pay, the
03:56 23 first thing you do is you check to see what people pay
03:56 24 for comparable homes in the same neighborhood, and
03:56 25 these are benchmarks.

03:56 1 Q. All right. And in this case, what would be a
03:56 2 good example of a benchmark, then?

03:56 3 A. It's exactly what the factor tells us to look
03:56 4 at. It's what SVV has actually received for licensing
03:56 5 its technology.

03:56 6 Q. And, Mr. Ferioli, has anyone paid for a
03:57 7 license to the patents-in-suit that we've been talking
03:57 8 about today?

03:57 9 A. Yes. It's happened twice.

03:57 10 Q. Okay. Let's talk about the first license that
03:57 11 you have up on the screen. That's already been in
03:57 12 evidence. What's that?

03:57 13 A. Oh, I see. So in the first row, this is the
03:57 14 agreement between SVV and Samsung. And it was entered
03:57 15 into on February 8th, 2021, and it granted a license to
03:57 16 14 patents, including the 4 asserted patents, [REDACTED]
03:57 17 [REDACTED] And this license covered
03:57 18 all Samsung products, including monitors.

03:57 19 Q. All right. Thank you.

03:57 20 Real quick before I get to the second one, go
03:57 21 ahead and open your binder and go ahead and turn to the
03:57 22 tab, the MSI license tab there.

03:57 23 A. Which tab would that be?

03:57 24 Q. All the way in the back. And then whenever
03:57 25 you get to that tab, I'm going to ask you to identify

03:57 1 that document for me.

03:58 2 A. Okay. I'm there.

03:58 3 Q. All right. What is that document?

03:58 4 A. This is the settlement and license agreement
03:58 5 between SVV and MSI.

03:58 6 Q. Is that something that you relied on in
03:58 7 formulating your opinions today?

03:58 8 A. Yes. It is.

03:58 9 MR. SIEGMUND: Your Honor, we'd offer
03:58 10 DTX-51.

03:58 11 MR. PEARSON: No objection.

03:58 12 THE COURT: It'll be admitted.

03:58 13 BY MR. SIEGMUND:

03:58 14 Q. All right. Let's discuss on the slide now
03:58 15 DTX-51, the MSI agreement.

03:58 16 A. I can close the binder, right?

03:58 17 Q. Yes.

03:58 18 A. So on the second row, we have the agreement
03:58 19 between SVV and MSI. It was entered into on
03:58 20 August 22nd, 2023, and it granted a license to 15
03:58 21 patents, once again including the asserted patents, [REDACTED]

03:58 22 [REDACTED] And this
03:58 23 license also covered monitors.

03:58 24 Q. Okay. And why is it important that these
03:58 25 licenses covered monitors, sir?

03:58 1 A. Well, because the accused products in this
03:58 2 case also are monitors.

03:58 3 Q. Okay. And would SVV and ASUS consider these
03:59 4 agreements in the hypothetical negotiation?

03:59 5 A. Yes. They would. So SVV and ASUS are sitting
03:59 6 there at the negotiating table, and they have the
03:59 7 Samsung and MSI agreements in front of them.

03:59 8 And so if you look on the bottom row of this
03:59 9 slide, you'll see that they would recognize that these
03:59 10 two agreements, just like the hypothetical negotiation,
03:59 11 have SVV as the licensor, have licensees in the same
03:59 12 industry, were entered into during the time period of
03:59 13 the hypothetical negotiation, licensed the asserted
03:59 14 patents, and licensed monitor products.

03:59 15 So across every category, you're finding that
03:59 16 these two agreements are comparable to the hypothetical
03:59 17 negotiation. They're actually great benchmarks, and so
03:59 18 the parties would absolutely consider them.

03:59 19 Q. Okay. Now, Dr. Farber I believe in his
03:59 20 testimony yesterday showed us some Xs where he believed
03:59 21 some differences were between these two agreements.
03:59 22 And I believe he concluded they aren't comparable.

03:59 23 What do you say about that?

03:59 24 A. Yes. He did, but I respectfully disagree.
04:00 25 See, the thing is, no two agreements are exactly the

04:00 1 same. So your starting point is not are they
04:00 2 different? Your starting point is are they similar
04:00 3 enough to be considered?

04:00 4 Q. Okay.

04:00 5 A. Once you establish that threshold of
04:00 6 comparability, you just adjust for the remaining
04:00 7 differences. And as you can see here, these agreements
04:00 8 are comparable on a fundamental level.

04:00 9 Q. All right. And you have a question mark under
04:00 10 the structure there. What's that for?

04:00 11 A. All right. So one of the things the parties
04:00 12 would consider from the agreements is what's called the
04:00 13 form or structure of the payment. And so if you look
04:00 14 at the Samsung and MSI agreements, you'll see they
04:00 15 specify what's called a "lump sum."

04:00 16 Q. What's a lump-sum payment?

04:00 17 A. A lump sum is when you agree to a single
04:00 18 upfront payment for the term of the agreement. And
04:00 19 this is different from a running royalty which is where
04:00 20 you make multiple payments over the term based on
04:00 21 sales.

04:00 22 Q. Are there benefits to structuring something as
04:00 23 a lump sum as opposed to a running royalty?

04:01 24 A. Yes. If you structure as a lump sum, you're
04:01 25 agreeing to one payment. So the deal's done in one go.

04:01 1 And you don't have to track and report sales, and you
04:01 2 don't have to worry about whether more or less products
04:01 3 will be sold through the term of the agreement.

04:01 4 And so this is a big benefit because it
04:01 5 provides certainty, and it lets the companies go back
04:01 6 to what they do best, just running their business.
04:01 7 They don't have to interact with each other.

04:01 8 Q. Has SVV structured its licenses as lump-sum
04:01 9 payments?

04:01 10 A. Yes. So the only two agreements that SVV has
04:01 11 ever entered into, which were the -- those Samsung and
04:01 12 MSI agreements, were both a lump sum.

04:01 13 Q. So what does that tell you about whether SVV
04:01 14 would accept a lump sum at the hypothetical
04:01 15 negotiation?

04:01 16 A. Well, because the only agreements that SVV has
04:01 17 entered into in the real world were both lump sums, it
04:01 18 tells me that they would also agree to a lump sum in
04:01 19 the hypothetical negotiation.

04:01 20 Q. All right. So we know that SVV has accepted
04:01 21 these types of structures before. What about ASUS?

04:01 22 A. Well, the evidence shows us that ASUS also
04:02 23 agrees to lump sums in the real world.

04:02 24 Q. So what is the structure that SVV and ASUS
04:02 25 would have agreed to at the hypothetical negotiation?

04:02 1 A. Well, a lump sum. That's what they've both
04:02 2 actually done in the real world.

04:02 3 Q. All right. Now, going to the next question
04:02 4 mark on your slide here, how do you determine that?

04:02 5 A. Well, just like before, we looked to what SVV
04:02 6 has actually agreed to in the real world.

04:02 7 Q. And how do you assess what SVV has agreed to
04:02 8 in their previous payments that they've done?

04:02 9 A. Well, one common method of evaluating payments
04:02 10 is to consider what that payment covered. So in this
04:02 11 case, it'd be licensed sales.

04:02 12 So the parties sitting there would be
04:02 13 comparing the licensed sales of Samsung and MSI to the
04:02 14 licensed sales for ASUS. Other things equal, if ASUS
04:02 15 has more licensed sales than Samsung, it would pay
04:02 16 more. If it has less licensed sales than Samsung, it
04:02 17 will pay less.

04:02 18 Q. All right. And let me ask you: Does ASUS
04:03 19 have more or less licensed sales than Samsung?

04:03 20 A. It has significantly less. So if you look on
04:03 21 the slide, Samsung, shown on the left, has 177 million
04:03 22 licensed televisions and monitors during the term of
04:03 23 the Samsung agreement. And so that's from March 2014
04:03 24 through September 2033.

04:03 25 Now, ASUS, which you see on the right, has

04:03 1 only sold 4.2 million accused products from
04:03 2 January 30th, 2018, through August 31st, 2024, which is
04:03 3 the term of the hypothetical license. So comparing
04:03 4 these two agreements, Samsung has about 40 times ASUS'
04:03 5 sales.

04:03 6 Q. So we know how we figured out how many sales
04:03 7 ASUS has. How did you determine the licensed sales for
04:03 8 Samsung?

04:03 9 A. Well, I relied on publicly available
04:03 10 information that provided estimates as to historical
04:04 11 sales for licensed Samsung products as well as
04:04 12 forecasts for future sales.

04:04 13 (Clarification by Reporter.)

04:04 14 BY MR. SIEGMUND:

04:04 15 Q. All right. And those sources you were telling
04:04 16 us about, are those reliable sources that economists
04:04 17 regularly rely on?

04:04 18 A. Yes. So I used data from IDC and Omdia, and
04:04 19 these are premier market research and intelligence
04:04 20 firms that regularly collect and provide data regarding
04:04 21 television and monitors.

04:04 22 And I also used data from UVS, McCrary, and
04:04 23 Bank of America, and these are global financial service
04:04 24 providers that provide in-depth analyses of companies
04:04 25 like Samsung. And so economists and others regularly

04:04 1 rely on the information provided by these types of
04:04 2 entities.

04:04 3 Q. And you were here yesterday, I believe, when
04:04 4 Dr. Farber reminded the jury that Dr. Vasylyev only
04:04 5 found that seven Samsung products were infringing his
04:05 6 technology.

04:05 7 Do you remember that?

04:05 8 A. Yes. I remember.

04:05 9 Q. And I believe he implied that that's why
04:05 10 Samsung would pay less.

04:05 11 Do you recall that, sir?

04:05 12 A. Yes. I recall that implication.

04:05 13 Q. All right. So let me ask you: Does Samsung
04:05 14 only sell seven products?

04:05 15 A. No. It sells a lot more than that. Those
04:05 16 seven were just the ones that Dr. Vasylyev investigated
04:05 17 as exemplary products. They're examples.

04:05 18 Q. Okay. And so whenever the lawsuit was filed
04:05 19 against Samsung, did it only say seven specific
04:05 20 products infringe?

04:05 21 A. No. When SVV sued Samsung, it said that
04:05 22 Samsung infringed for its LED display devices,
04:05 23 including monitors, televisions, tablets, and other
04:05 24 handheld devices.

04:05 25 Q. And more importantly, does the Samsung

04:05 1 agreement, the license agreement that we're talking
04:05 2 about, does it say that it grants a license to only
04:05 3 seven products?

04:05 4 A. No. It doesn't.

04:05 5 Q. What's it -- what does it actually say?

04:05 6 A. It says that it covers all Samsung products.
04:05 7 And you wouldn't read that and think dishwashers and
04:06 8 refrigerators, but you would at least presume it to
04:06 9 include the products that SVV sued them for.

04:06 10 Q. All right. So what do you conclude from
04:06 11 making this comparison that you've depicted on the
04:06 12 slide here?

04:06 13 A. Well, because ASUS has significantly fewer
04:06 14 sales than Samsung, other things equal, it would pay
04:06 15 less.

04:06 16 So remember, ASUS is sitting there, and it
04:06 17 knows that its competitor Samsung [REDACTED] for
04:06 18 license. So there's no way it would pay more
04:06 19 considering its significantly fewer sales. So the
04:06 20 parties would start at Samsung's [REDACTED]
04:06 21 and adjust downwards to reflect ASUS' actual licensed
04:06 22 sales.

04:06 23 Q. Let me ask you this: Why is it relevant that
04:06 24 Samsung is a competitor of ASUS?

04:06 25 A. Well, if ASUS had to pay significantly more

04:06 1 than a competitor, that could put it at a competitive
04:06 2 disadvantage. It's going to seek comparable treatment
04:06 3 to Samsung to continue to compete.

04:06 4 Q. So how did you adjust for the Samsung payment
04:06 5 to account for the fact that ASUS has significantly
04:07 6 lower licensed sales?

04:07 7 A. Well, because Samsung has about 40 times the
04:07 8 licensed sales, I need to find a way to scale that
04:07 9 payment to reflect ASUS' much fewer sales.

04:07 10 And so I do this by dividing Samsung's
04:07 11 payment, [REDACTED] by the 177 million licensed
04:07 12 sales. [REDACTED]

04:07 13 Now, if you consider that the minimum selling
04:07 14 price of a licensed Samsung monitor is about \$140, that
04:07 15 works out to be an effective rate of 0.018 percent of
04:07 16 revenues. So in other words, that 2.5 cents is about
04:07 17 0.018 percent of the revenues that Samsung expected to
04:07 18 receive for its licensed monitors.

04:07 19 Q. So other than the scaling, the Samsung
04:07 20 agreement that you kind of discussed based on ASUS'
04:07 21 limited sales, are there other differences that you
04:07 22 need to account for?

04:07 23 A. Yes. So as I mentioned earlier, I still need
04:07 24 to adjust for the differences between the Samsung
04:07 25 agreement and the hypothetical negotiation.

04:08 1 Q. All right. What do you mean by that?

04:08 2 A. Well, let's think back to that example I gave
04:08 3 you earlier of when you're buying or renting a house.
04:08 4 No two houses are the same, right?

04:08 5 And so when you look at your benchmark, other
04:08 6 than considering the size of the home, you consider
04:08 7 differences such as is there a different type of
04:08 8 flooring, like wood flooring, or maybe there are
04:08 9 additional bathrooms or appliances are included.

04:08 10 And so you take the price of that benchmark
04:08 11 home, and you adjust it upwards or downwards to account
04:08 12 for those differences in deciding what you should pay.

04:08 13 And it works the same for agreements. No two
04:08 14 agreements are the same. And so you adjust for the
04:08 15 important differences.

04:08 16 Q. Is this something that economists do all the
04:08 17 time?

04:08 18 A. Yes. It's routine. Economists regularly rely
04:08 19 on license agreements. And the differences in this
04:08 20 case weren't unique or special. Actually, the
04:08 21 differences for the Samsung agreement were ones that
04:08 22 economists commonly find and account for.

04:08 23 Q. All right. So let's get into the differences.
04:08 24 What's the first adjustment that you needed to
04:09 25 make, sir?

04:09 1 A. Well, the first difference that I address is
04:09 2 that the Samsung agreement is a settlement agreement
04:09 3 that resolved litigation.

04:09 4 So if you look at the slide, you'll see the
04:09 5 agreement specifically states there was no admission of
04:09 6 liability. Now, this is different from the
04:09 7 hypothetical negotiation, where I'm forced to assume
04:09 8 liability through infringement and validity of the
04:09 9 licensed patents.

04:09 10 Q. Why is this important?

04:09 11 A. Well, because it means that there was
04:09 12 uncertainty in the Samsung agreement. SVV's patents
04:09 13 could have been found invalid or not infringed. They
04:09 14 could have decided that Samsung did not use the
04:09 15 patented technology. And so to settle the litigation,
04:09 16 SVV may have accepted a lesser payment.

04:09 17 The hypothetical negotiation doesn't have this
04:09 18 issue. So to account for this absence of uncertainty,
04:09 19 I have to make an upward adjustment to Samsung's
04:09 20 payment.

04:09 21 Q. All right. Are there any other additional
04:09 22 differences that you need to account for?

04:10 23 A. Yes. The next difference that I address is
04:10 24 the fact that the Samsung agreement grants the license
04:10 25 to 14 patents. Whereas the hypothetical license to

04:10 1 ASUS is only the four patents.

04:10 2 And so it's a bit of common sense. If you pay
04:10 3 more, you pay more to get more. And in this case, ASUS
04:10 4 is getting less. So it would pay less. And I make a
04:10 5 downward adjustment to Samsung's payment.

04:10 6 Q. All right. Let's go on to the next
04:10 7 difference.

04:10 8 What are we looking at on the screen here,
04:10 9 sir?

04:10 10 A. So the next difference that I address is that
04:10 11 the Samsung agreement grants a license to more products
04:10 12 than the hypothetical license to ASUS.

04:10 13 So if you look on the left, you'll see that
04:10 14 the Samsung agreement, other than covering those
04:10 15 licensed televisions and monitors that we already
04:10 16 looked at sales for, it also covered tablets,
04:10 17 smartphones, notebooks, and display panels.

04:10 18 And the ASUS license only covers the accused
04:10 19 monitors.

04:10 20 Q. All right. So again, why is this important?

04:11 21 A. Well, it's the same sort of idea as before.
04:11 22 You pay more to get more. So if you're licensing more
04:11 23 products, you're going to pay more.

04:11 24 Q. Okay. Let's talk about the display panels
04:11 25 specifically for just a second. You were here this

04:11 1 morning, I believe, when counsel asked Mr. Lee about
04:11 2 the ASUS products with the Samsung panels in them.

04:11 3 Do you remember that?

04:11 4 A. Yes. I do.

04:11 5 Q. And when did Samsung receive its license from
04:11 6 SVV?

04:11 7 A. I believe that was February 2021. If we could
04:11 8 go back a slide, if we need to check, I'm pretty sure
04:11 9 that's right.

04:11 10 Q. Yeah. And importantly, when did SVV sue ASUS?

04:11 11 A. In March of 2022.

04:11 12 Q. So is that after Samsung was licensed then?

04:11 13 A. Yes. It was.

04:11 14 Q. And so would you expect to find ASUS products
04:11 15 with Samsung panels in the accused products?

04:11 16 A. No. You wouldn't.

04:11 17 Q. Why?

04:11 18 A. Well, because those products have Samsung
04:11 19 display panels, that means they're already licensed by
04:11 20 the Samsung agreement.

04:12 21 So the way to think of it is the Samsung
04:12 22 agreement didn't just license it --

04:12 23 Can you go back to the previous slide?

04:12 24 Q. Yes.

04:12 25 A. The Samsung agreement didn't just license

04:12 1 those televisions, monitors, and products you see on
04:12 2 the left. It also licensed other companies' products
04:12 3 that used those Samsung display panels. So it's not
04:12 4 just Samsung products; it's also other people's
04:12 5 products that got licensed by it.

04:12 6 Q. All right. So can you briefly summarize the
04:12 7 adjustments that you made to the Samsung payment that
04:12 8 you -- we have just been discussing here?

04:12 9 A. Sure. So to recap, I started with the Samsung
04:12 10 lump-sum payment which was an effective payment of
04:12 11 0.018 percent of revenues. And then I made the upward
04:12 12 adjustment to account for the Samsung agreement being a
04:12 13 litigation settlement agreement.

04:12 14 And then I talked about a downward adjustment
04:12 15 to account for the Samsung -- to account for ASUS
04:12 16 licensing significantly fewer patents. And I made one
04:12 17 more downward adjustment to account for ASUS licensing
04:13 18 significantly fewer products.

04:13 19 Q. Okay. Let's talk about the last red arrow
04:13 20 there. The last red arrow also indicates an adjustment
04:13 21 for using the technology less.

04:13 22 Can you explain that?

04:13 23 A. Yes. So I still have to account for the fact
04:13 24 that Samsung uses half of the asserted patents
04:13 25 significantly more than ASUS.

04:13 1 If you recall, two of the patents dealt with
04:13 2 quantum products. And Samsung is the market leader of
04:13 3 something called QLED. It has an entire product line
04:13 4 dedicated to these quantum products, and they represent
04:13 5 about more than 12 percent of its television sales.

04:13 6 Now, in comparison, ASUS only has five accused
04:13 7 QLED products, and they are half a percent of the
04:13 8 accused sales in this case. So Samsung is
04:13 9 significantly using half the asserted patents more than
04:13 10 ASUS.

04:13 11 Q. All right. So kind of in sum here, what do
04:13 12 you conclude from this analysis that you have on the
04:13 13 screen?

04:13 14 A. Well, after considering the necessary upward
04:13 15 and downward adjustments and considering them all
04:14 16 together, I determined that an appropriate comparable
04:14 17 payment for ASUS would be an effective payment of
04:14 18 0.05 percent of revenues.

04:14 19 Q. Now, we briefly hit on the MSI agreement.
04:14 20 Did you do this analysis for the MSI
04:14 21 agreement?

04:14 22 A. No. I didn't. So sales data weren't
04:14 23 available for the licensed MSI products. So it
04:14 24 couldn't be done.

04:14 25 Q. All right. So what is the impact of using

04:14 1 this percentage that we've just talked about to scale
04:14 2 the Samsung license agreement to the hypothetical
04:14 3 negotiation between SVV and ASUS, sir?

04:14 4 A. Well, taking that 0.05 percent and applying it
04:14 5 to sales revenues for the accused products between
04:14 6 January 30th, 2018, and August 31st, 2024, calculates a
04:14 7 lump sum through trial or through August 31st, 2024, of
04:14 8 \$425,158.

04:14 9 Q. And in your opinion, is that reasonable, sir?

04:14 10 A. Yes. Remember, Samsung has 40 times ASUS'
04:15 11 sales. So it definitely wouldn't pay more than
04:15 12 Samsung.

04:15 13 Q. Okay. And how do we know that SVV would also
04:15 14 find this reasonable in the hypothetical negotiation?

04:15 15 A. Because this payment is based on what SVV has
04:15 16 already agreed to in the real world in its other
04:15 17 agreements. And if they're willing to agree to these
04:15 18 payments in the real world, they would be willing in
04:15 19 the hypothetical negotiation, especially after we've
04:15 20 adjusted for the differences between the Samsung
04:15 21 agreement and the hypothetical negotiation.

04:15 22 Q. Okay. Let's kind of move on to the next phase
04:15 23 here.

04:15 24 You heard Dr. Farber's testimony yesterday; is
04:15 25 that right?

04:15 1 A. Yes. I did.

04:15 2 Q. And were you asked to evaluate his methodology
04:15 3 and conclusions that he provided?

04:15 4 A. Yes. I was.

04:15 5 Q. And what were your opinions about some of the
04:15 6 conclusions that he reached?

04:15 7 A. Well, there were areas that we agreed, but at
04:15 8 the end of the day, I fundamentally disagreed with his
04:15 9 analysis and conclusions. And there were three main
04:16 10 reasons.

04:16 11 The first is that his analysis disregards
04:16 12 real-world benchmarks like the Samsung agreement.

04:16 13 The second issue is that his conclusions
04:16 14 overstate the importance of the patented technology.

04:16 15 And the third issue is that his regression is
04:16 16 not reliable.

04:16 17 Q. All right. Let's dig into this. So let's
04:16 18 start with the first one.

04:16 19 Why do you say that Dr. Farber disregards
04:16 20 real-world benchmarks?

04:16 21 A. Well, because his damages are contrary to what
04:16 22 we see in the real world. So if you look on the right
04:16 23 of this slide, you'll see in the big red bar that
04:16 24 Dr. Farber has damages for ASUS of 58.6 million, and
04:16 25 that's just for four patents.

04:16 1 But let's look at the real world now.

04:16 2 If you look at Samsung, [REDACTED],

04:16 3 and that was for 14 patents. And MSI [REDACTED]

04:16 4 [REDACTED] for 15 patents.

04:16 5 So the damages calculated by Dr. Farber,
04:16 6 they're significantly greater than what anyone has ever
04:16 7 actually paid for this technology in the real world.

04:17 8 There's nowhere near the benchmarks.

04:17 9 But the thing is it's actually a little worse
04:17 10 than that. Because Dr. Farber isn't just saying that
04:17 11 ASUS should pay significantly more than everyone else;
04:17 12 he's saying that they should pay significantly more and
04:17 13 get less for it.

04:17 14 Q. All right. Let's explain that a little bit
04:17 15 more for the jury.

04:17 16 What do you mean by that? And can you kind of
04:17 17 walk us through what we're looking at here?

04:17 18 A. Sure. So on this slide, we have a comparison
04:17 19 of the Samsung agreement and Dr. Farber's opinions.
04:17 20 And if you look at the top, you can see on the left of
04:17 21 the box that Samsung [REDACTED]. And on the
04:17 22 right, we have Dr. Farber's damages for ASUS which are
04:17 23 58.6 million. [REDACTED].

04:17 24 But now let's look at the bottom and let's see
04:17 25 what they got for their respective payments.

04:17 1 On the left for its payment of [REDACTED],
04:17 2 Samsung got a license to 19.5 years, 14 patents, a wide
04:17 3 variety of products, and at least 177 million licensed
04:18 4 sales.

04:18 5 Now let's look at ASUS. For its significantly
04:18 6 larger payment, what are they getting? They're getting
04:18 7 less years, less patents, less products, less sales.

04:18 8 So according to Dr. Farber, despite paying [REDACTED]
04:18 9 [REDACTED] what Samsung paid, ASUS gets less of everything,
04:18 10 a fraction of the years, a fraction of the patents, a
04:18 11 fraction of the products.

04:18 12 Now, remember, the parties to the hypothetical
04:18 13 negotiation have to be reasonable. ASUS is sitting
04:18 14 there, and it knows what Samsung paid as well as what
04:18 15 Samsung got for it. Now, if you were ASUS, would you
04:18 16 [REDACTED] to get so much less?
04:18 17 No. You wouldn't do it because it's not reasonable.

04:18 18 Q. So what does this tell you, then, sir?

04:18 19 A. Well, it tells me that Dr. Farber's
04:18 20 conclusions, he completely disregarded what's actually
04:19 21 happened in the real world because there's no way to
04:19 22 reconcile his conclusions with the real-world
04:19 23 benchmarks.

04:19 24 Q. All right. Let's go on to the next
04:19 25 disagreement with Dr. Farber.

04:19 1 And what is that?

04:19 2 A. Well, my next issue with Dr. Farber's analysis
04:19 3 is that his conclusions overstate the importance of the
04:19 4 patented technology and excessively reward SVV for
04:19 5 ASUS' success.

04:19 6 Q. How so?

04:19 7 A. Well, if you look at the chart on the slide,
04:19 8 you'll see that Dr. Farber's royalties are more than
04:19 9 half of ASUS' profits. And that just doesn't make any
04:19 10 sense because the licensed technology doesn't
04:19 11 contribute to SVV's success -- sorry -- to ASUS'
04:19 12 success. It doesn't contribute to the success of their
04:19 13 products.

04:19 14 So you heard Mr. Lee testify earlier the
04:19 15 consumers don't care about backlight panel technology.
04:19 16 They care about things like refresh rates and color
04:19 17 accuracy. And you could also see that in the marketing
04:19 18 materials that they were shown to you. It's these
04:20 19 types of features that were stressed to the consumers.

04:20 20 And so if you were ASUS, would you pay more
04:20 21 than half of your profits for technology that isn't
04:20 22 contributing to your success? And would you do that
04:20 23 knowing that your competitor Samsung is only paying
04:20 24 0.018 percent of their revenues to license the same
04:20 25 technology? No. You wouldn't do that.

04:20 1 Q. So kind of in conclusion on this, what does
04:20 2 this tell you, then?

04:20 3 A. Well, it tells me that his conclusions aren't
04:20 4 reasonable. No rational entity would agree to that
04:20 5 transaction. No one would pay more than half of their
04:20 6 profits for technology that's not important.

04:20 7 Q. Okay. Before we move on from this,
04:20 8 Mr. Ferioli, this was discussed, I think, yesterday,
04:20 9 but if only the '318 and the '089 patents are found to
04:20 10 be infringed, and those are the quantum patents, is it
04:20 11 realistic to give \$58 million to SVV if only those two
04:20 12 are infringed?

04:21 13 A. No. So those two patents were the ones
04:21 14 relating to quantum products which were half a percent
04:21 15 of the accused sales. And so it wouldn't be realistic
04:21 16 to get 58 million for that. As you heard Dr. Farber
04:21 17 say, I believe it was yesterday, under his damages
04:21 18 approach, if we're just talking about those two
04:21 19 patents, the damage is about 200- to 300,000.

04:21 20 Q. Okay. Let's go on to the third disagreement.
04:21 21 Can you briefly remind the jury of kind of what
04:21 22 Dr. Farber's regression analysis was?

04:21 23 A. So all through this week, you've been hearing
04:21 24 about something called the backlight panel and an LCD
04:21 25 monitor. And SVV says that their technology improves

04:21 1 that backlight panel. And so Dr. Farber ran a
04:21 2 regression, and he said that his regression shows that
04:21 3 using that technology, ASUS saves \$21.85 per monitor.

04:21 4 Q. Okay. And did you do any real-world checks on
04:22 5 kind of the analysis that he reached?

04:22 6 A. Yes. I did.

04:22 7 Q. Okay. And let's go to the next slide.
04:22 8 Can you show us what you did?

04:22 9 A. Sure. So I looked at the data that Dr. Farber
04:22 10 uses for his regression analysis to see if he was
04:22 11 sufficiently identifying costs. And I found that he
04:22 12 was failing to identify significant costs. And I've
04:22 13 got an example for this on the slide for you.

04:22 14 So if you look on the left, you'll see an ASUS
04:22 15 ProArt monitor, and it has display module panel
04:22 16 M270KCJ. Now, this is an accused product, and its cost
04:22 17 to ASUS was \$265. If you look on the right, you have
04:22 18 the same exact ProArt monitor, so it's the same
04:22 19 features, same specifications. It's the same in every
04:22 20 respect except it's a different display module. This
04:22 21 product's also accused, and its cost to ASUS was \$193.

04:23 22 So that's about a \$70 difference between these
04:23 23 two identical products that's attributable to the
04:23 24 different display module and has nothing to do with the
04:23 25 patents because they're both accused. And the problem

04:23 1 is that Dr. Farber's regression can't account for this
04:23 2 cost difference.

04:23 3 Q. How does it not account for this?

04:23 4 A. Well, because despite adding all of those
04:23 5 variables, all the variables added by Dr. Farber,
04:23 6 they're specific to the model. So his regression can't
04:23 7 distinguish between these two products. It has no way
04:23 8 to account for that significant cost difference.

04:23 9 Q. So what does this do for his regression?

04:23 10 A. Well, it makes it inaccurate because his
04:23 11 regression can't distinguish between costs in the
04:23 12 display module that are coming from the patents and
04:23 13 costs in the display module that are coming from
04:23 14 anything else like what you see here.

04:23 15 Q. All right. Let me ask you this, sir: Is
04:23 16 there anything wrong in general with using a
04:23 17 regression?

04:23 18 A. No. There isn't. What matters is how you use
04:23 19 it. And when you're done running your regression, you
04:23 20 don't just run your test for statistical accuracy and
04:24 21 accept the results.

04:24 22 Now, an economist has to take the results and
04:24 23 compare them to what's available to them in the real
04:24 24 world to see if those results make sense, to see if the
04:24 25 estimates are sound.

04:24 1 Q. What happens if you do that for Dr. Farber's
04:24 2 regression?

04:24 3 A. Well, if you do that, you find that ASUS
04:24 4 couldn't have had cost savings of \$21.85. It literally
04:24 5 wasn't possible.

04:24 6 Q. And why is that?

04:24 7 A. Because the average cost of the backlight
04:24 8 panel and these types of monitors is less than \$14. So
04:24 9 the cost savings calculated by Dr. Farber are more than
04:24 10 50 percent greater than the entire cost of the
04:24 11 backlight panel. And that's impossible because you
04:24 12 can't have cost savings that exceed total costs.

04:24 13 You can't save more than something would cost
04:24 14 you in the first place. If it cost you \$14 to make a
04:24 15 backlight panel, you can't save \$22 on it.

04:24 16 Q. How do you know that the backlight panel costs
04:25 17 less than \$14?

04:25 18 A. So I used publicly available information. I
04:25 19 had market reports from KGI, which is a global
04:25 20 financial service provider, as well as industry data
04:25 21 from Omdia, which is a market research intelligence
04:25 22 firm. And these data showed that the average cost of
04:25 23 the backlight panel was less than \$14 for these types
04:25 24 of monitors.

04:25 25 Q. And why are the cost savings limited to the

04:25 1 backlight panel?

04:25 2 A. Well, because that's the part of the product
04:25 3 that the patents benefit. That's my understanding from
04:25 4 conversations with ASUS' technical experts, but also I
04:25 5 didn't hear anything different this week from
04:25 6 Dr. Vasylyev or Dr. Credelle.

04:25 7 Q. All right. So what does that mean for
04:25 8 Dr. Farber's analysis, then?

04:25 9 A. Well, it means that his analysis isn't
04:25 10 reliable because he's starting in the wrong place.
04:25 11 He's starting on the left, which is the entire cost of
04:25 12 the monitor, this big orange bar. And you already know
04:26 13 that there are lots of parts and features that have
04:26 14 nothing to do with the patented technology inside the
04:26 15 monitor.

04:26 16 So if you start in the wrong place, you can
04:26 17 capture all of those unrelated costs. And if you have
04:26 18 bad inputs, you're going to get bad outputs. And
04:26 19 that's how you can get an impossible result like cost
04:26 20 savings that exceed total cost.

04:26 21 Q. Okay. I think Dr. Farber mentioned something
04:26 22 about that even if his regression might have some
04:26 23 errors or some mistakes, he mentioned something called
04:26 24 attenuation bias.

04:26 25 I'm not an economist, but can you explain

04:26 1 that? What does that mean to the jury?

04:26 2 A. Well, at a high level, attenuation bias, it's
04:26 3 a statistical theory that if there's something wrong or
04:26 4 if there's some kind of flaw, it's fine because it
04:26 5 biases your result towards zero, which is a way of
04:26 6 saying that -- it's saying your answer is conserved
04:26 7 because the right answer would be larger.

04:26 8 But attenuation bias isn't applicable to every
04:26 9 circumstance. If the problem with your model is that
04:26 10 your answer is so large that it's an impossible result,
04:27 11 then saying don't worry, the real answer should be
04:27 12 larger doesn't solve the problem.

04:27 13 Q. All right. You kind of mentioned this
04:27 14 already, but what's kind of the main -- the main issue
04:27 15 with Dr. Farber's regression model, sir?

04:27 16 A. Well, there's more than one issue, but the
04:27 17 biggest issue right here is that he's starting in the
04:27 18 wrong place. He's starting with the entire cost of the
04:27 19 monitor, and you got to be starting with the backlight
04:27 20 panel.

04:27 21 Q. Now, could Dr. Farber have fixed this problem
04:27 22 with his regression model?

04:27 23 A. No. As you heard yesterday, it wasn't
04:27 24 possible to run a regression on the backlight panel.
04:27 25 But that doesn't mean you just accept the wrong result.

04:27 1 At the very least, Dr. Farber should have apportioned
04:27 2 his result to reflect the cost of the patented
04:27 3 technology at issue.

04:27 4 Q. All right. That's kind of a new term,
04:27 5 "apportionment."

04:27 6 Why is apportionment important in patent
04:27 7 cases?

04:27 8 A. Well, apportionment is this idea of where you
04:27 9 narrow your answer to the patented technology. And
04:27 10 this is important because SVV is only entitled to
04:28 11 receive payment for the contribution of its patents.
04:28 12 SVV doesn't get paid for the contribution of
04:28 13 technologies that it's not bringing to the table.

04:28 14 Q. How could Dr. Farber have done that in his
04:28 15 analysis?

04:28 16 A. Well, he would have to take his cost savings,
04:28 17 which if you'd go to the next slide, they're on the
04:28 18 left in that big red bar. That's \$21.85. And he'd
04:28 19 have to proportionally reduce it to the cost of the
04:28 20 backlight panel. And then from there, he'd have to
04:28 21 remove the contributions of the backlight panel
04:28 22 technologies that SVV did not invent.

04:28 23 Q. All right. And have you run the math on what
04:28 24 that type of apportionment would look like?

04:28 25 A. Yes. And so it's what we see here on this

04:28 1 slide. So on the left, you have the cost savings he
04:28 2 calculates using the entire cost of the monitor; that's
04:28 3 the \$21.85.

04:28 4 And so from the previous slide, we know that
04:28 5 the backlight panel at \$14 is a little over 10 percent
04:28 6 of the cost of that entire monitor which was 129.

04:29 7 So if you reduce the cost savings, which were
04:29 8 based on the entire monitor by that scale, that gets
04:29 9 you to cost savings of \$2.37, which are just for the
04:29 10 backlight panel.

04:29 11 Q. Okay. So you scaled down to the \$2.37 per
04:29 12 unit.

04:29 13 What did you do after that?

04:29 14 A. Well, next I have to remove the contribution
04:29 15 of the technologies that SVV did not provide to the
04:29 16 backlight panel. Because, as you've heard this week,
04:29 17 SVV did not invent backlight panels. They didn't
04:29 18 invent the technologies that go inside the backlight
04:29 19 panel like the diffuser, the LED, the optical film.

04:29 20 And so you have to remove the contribution in
04:29 21 these technologies that are working together with the
04:29 22 asserted patents to provide that benefit.

04:29 23 And so my understanding from ASUS' technical
04:29 24 experts is that the patents contribute less than
04:29 25 20 percent to that overall net benefit from the

04:29 1 infringing functionality in the backlight panel. And
04:29 2 so I reduced the cost savings of \$2.37 by that
04:30 3 20 percent to get cost savings of 47 cents, which have
04:30 4 been narrowed down to just the contribution of SVV's
04:30 5 patents.

04:30 6 Q. Okay. So very simply, what does the 47 cents
04:30 7 per unit represent?

04:30 8 A. Well, that represents the contribution just
04:30 9 looking at SVV's patents. So it's what they're
04:30 10 actually bringing to the table.

04:30 11 Q. All right. And, Mr. Ferioli, how many units
04:30 12 are at issue in this case?

04:30 13 A. 4.2 million.

04:30 14 Q. Okay. And so I think we heard a little bit
04:30 15 about this yesterday, but just like Dr. Farber
04:30 16 explained, how would you go about reaching a conclusion
04:30 17 with this cost savings under his analysis?

04:30 18 A. Well, Dr. Farber multiplies units by the
04:30 19 royalty rate.

04:30 20 MR. PEARSON: Objection, Your Honor.
04:30 21 This is outside the scope of --

22 (Clarification by Reporter.)

04:30 23 MR. PEARSON: This is outside the scope
04:30 24 of his disclosure. He never calculated an alternative
04:30 25 damages model using this 47 cents per unit.

04:30 1 MR. SIEGMUND: Your Honor, we're not
04:30 2 calculating an alternative damage model. He's just
04:30 3 doing the math and showing what a real apportionment in
04:31 4 our view would look like. And so that's just 47 cents
04:31 5 times the units.

04:31 6 THE COURT: If he didn't do that -- if he
04:31 7 didn't disclose that in his report, he's not going to
04:31 8 do it here.

04:31 9 MR. SIEGMUND: Okay. Understood,
04:31 10 Your Honor. We'll move on.

04:31 11 BY MR. SIEGMUND:

04:31 12 Q. All right, sir. Let's go on -- actually, let
04:31 13 me back up just for one second because I think we kind
04:31 14 of skipped over this.

04:31 15 Just very quickly, what is the orange bar that
04:31 16 you depicted on the slide? I think we might have
04:31 17 skipped over that.

04:31 18 A. So that's the average cost of the entire
04:31 19 monitor.

04:31 20 Q. And that's what Dr. Farber started with?

04:31 21 A. Yes.

04:31 22 Q. Okay. What's the blue bar?

04:31 23 A. The blue bar is the average cost of the
04:31 24 backlight panel.

04:31 25 Q. And then what is the red bar?

04:31 1 A. Those are Dr. Farber's cost savings.

04:31 2 Q. And why is it a problem that the red bar is
04:31 3 bigger than the blue bar?

04:31 4 A. Well, because the blue bar is what your cost
04:31 5 savings are coming from. So it shouldn't be bigger.

04:31 6 Q. All right. Let's go to this slide.

04:31 7 And could you please summarize your
04:31 8 conclusions as to Dr. Farber's analysis for the jury,
04:32 9 sir?

04:32 10 A. Sure. So Dr. Farber's conclusions are not
04:32 11 appropriate guidance as to the outcome of the
04:32 12 hypothetical negotiation. And the problem is that his
04:32 13 positions are ones that would not be reasonable to any
04:32 14 party.

04:32 15 So ASUS is sitting there, and it knows what
04:32 16 Samsung paid as well as what it got for that payment.
04:32 17 So ASUS would not agree to pay significantly more than
04:32 18 Samsung to receive significantly less.

04:32 19 And ASUS would not agree to pay half its
04:32 20 profits for technology that's not important to its
04:32 21 customers, especially when its competitor Samsung is
04:32 22 only paying 0.018 percent of revenues to license that
04:32 23 same technology.

04:32 24 And ASUS would not agree to an estimate of
04:32 25 cost savings that exceeds total costs when that's

04:32 1 impossible.

04:32 2 And so any one of these positions would make
04:32 3 the parties unable to reach an agreement. So it can't
04:32 4 be the outcome of the hypothetical negotiation that
04:32 5 requires you find a position that both sides can
04:32 6 accept.

04:32 7 Q. All right. And can you please remind the jury
04:33 8 of your conclusion as to what you believe the outcome
04:33 9 of the hypothetical negotiation should be?

04:33 10 A. That using the Samsung agreement as a
04:33 11 benchmark, SVV and ASUS would agree to a lump sum
04:33 12 through trial of \$425,158.

04:33 13 MR. SIEGMUND: Thank you, sir.

04:33 14 Pass the witness, Your Honor.

04:33 15 CROSS-EXAMINATION

04:33 16 BY MR. PEARSON:

04:33 17 Q. Good afternoon, Mr. Ferioli.

04:33 18 A. Good afternoon, Mr. Pearson.

04:34 19 Q. As I understand it, there were sort of two big
04:34 20 ideas in your testimony. One, you presented a damages
04:34 21 model to the jury of what you thought damages would be
04:34 22 appropriate in this case. And then another sort of
04:34 23 half of your opinion was criticizing or stating your
04:34 24 disagreements with Dr. Farber.

04:34 25 Does that seem fair?

04:34 1 A. Yeah. That's a fair assessment.

04:34 2 Q. So I'd like to first address your
04:34 3 disagreements with Dr. Farber and then move on to your
04:34 4 own damages calculations. Is that okay?

04:34 5 A. Sure. We can do that.

04:34 6 MR. PEARSON: Mr. Diaz, may I please have
04:34 7 the ELMO?

04:34 8 BY MR. PEARSON:

04:34 9 Q. And you recognize this slide. This is, I
04:34 10 guess, one of your big ideas that Dr. Farber's analysis
04:35 11 just must be wrong because nobody in their right mind
04:35 12 would pay 52 percent of their overall profits as a
04:35 13 patent license royalty payment. Is that a fair
04:35 14 assessment?

04:35 15 A. Well, not based on the facts of this case.
04:35 16 Yes.

04:35 17 Q. So maybe there's a case where someone would
04:35 18 pay 52 percent of their profits, but you just don't
04:35 19 think this is the one?

04:35 20 A. Well, that's a lot of profit. So it'd have to
04:35 21 be very important technology. But I'm sure there's a
04:35 22 case that could happen like that. Sure.

04:35 23 Q. Okay. This 52 percent that you calculated,
04:35 24 that was calculated using ASUS' consolidated financial
04:35 25 statements, right?

04:35 1 A. No. That's -- do you want me to explain where
04:35 2 it came from?

04:35 3 Q. Sure.

04:35 4 A. So that's based on the average profit for the
04:35 5 products. It's the sales data, not their consolidated
04:35 6 or aggregate company financials.

04:35 7 Q. You sure?

04:36 8 A. Yes.

04:36 9 Q. This is your calculation.

04:36 10 A. Yeah.

04:36 11 Q. Okay. You have a smaller binder in front of
04:36 12 you.

04:36 13 A. This one?

04:36 14 Q. That was the smaller one. Yes.

04:36 15 Could you please turn to --

04:36 16 A. Oh, I understand what you're asking now.

04:36 17 Q. Your supplemental Table 7C, does that
04:36 18 reflect -- refresh your recollection?

04:36 19 A. Yes. I understand. It's based on a
04:36 20 combination of consolidated and selling data. Yes.

04:36 21 Q. Right. So you started with the profit
04:36 22 information from the consolidated financial statements,
04:36 23 and then you did a ratio of average profit per unit
04:36 24 from the consolidated financial statements against
04:37 25 Dr. Farber's per-unit reasonable royalty, right?

04:37 1 A. Right. I used the selling data to get the
04:37 2 gross profit per unit; then used the 10-Ks to remove
04:37 3 the other expenses. And that profit is what you
04:37 4 compare to Dr. Farber's royalty. Yes. I think you
04:37 5 summarized that pretty well.

04:37 6 Q. Okay. So that's the consolidated financial
04:37 7 statements, right?

04:37 8 A. I believe so. Yes.

04:37 9 Q. All right. You've been here all week, right?

04:37 10 A. Yes.

04:37 11 Q. And do you recall when Dr. Farber described
04:37 12 the difference in the consolidated and the
04:37 13 nonconsolidated financial statements that ASUS produced
04:37 14 to the jury?

04:37 15 A. Yes. I remember.

04:37 16 Q. And you agree that the consolidated financial
04:37 17 statements roll up all of the profit and expenses
04:38 18 information from all of ASUS' subsidiaries, right?

04:38 19 A. Yes. That's the definition of a consolidated
04:38 20 statement.

04:38 21 Q. Okay. And that's -- and the consolidated ones
04:38 22 are the ones you use for the 52 percent?

04:38 23 A. Yes.

04:38 24 Q. And you saw this chart earlier this week.

04:38 25 This is a summary, an organization chart of

04:38 1 ASUS' subsidiaries, right?

04:38 2 A. Yes. I'm aware of it.

04:38 3 Q. What does Unimax Electronics Inc. have to do
04:38 4 with this case?

04:38 5 A. I don't know.

04:38 6 Q. Okay. How about Shinewave International Inc.?

04:38 7 A. Other than being a subsidiary of ASUS, I don't
04:38 8 know what relation it would have.

04:38 9 Q. ASUS Cloud (Luxembourg) SARL, what do they
04:38 10 have to do with this case?

04:38 11 A. Same as before, just that they're a subsidiary
04:39 12 of ASUS.

04:39 13 Q. Despite all these subsidiaries' irrelevance,
04:39 14 you still used their financial information as part of
04:39 15 your profit calculation in this case, right?

04:39 16 A. Yes. It's more appropriate.

04:39 17 Q. I was doing my best to follow this slide, but
04:39 18 what I gathered is you believe that based on the
04:39 19 comparison of these two products, that is a -- it
04:39 20 provides an indication that Dr. Farber's analysis must
04:39 21 be incorrect; is that fair?

04:39 22 A. That it's not accurate. Yes.

04:40 23 Q. Okay. And this one's infringing?

04:40 24 A. Yes.

04:40 25 Q. Okay. And if the jury finds infringement in

04:40 1 this case, the other one will be infringing too, right?

04:40 2 A. Yes. That's correct.

04:40 3 Q. And so it's your opinion that if two different
04:40 4 infringing monitors have different costs, Dr. Farber
04:40 5 must be wrong?

04:40 6 A. No. I wouldn't describe it that way.

04:40 7 Q. And it's your opinion that somehow within a
04:40 8 model that costs either \$265 or \$193, there's not room
04:40 9 for additional savings of 21.85?

04:40 10 A. No. It's to illustrate that his regression
04:40 11 can't identify those costs.

04:40 12 Q. Well, let's talk about the regression.
04:41 13 You have a lot of experience with regressions,
04:41 14 right?

04:41 15 A. Yes. I've used them before.

04:41 16 Q. Many times probably?

04:41 17 A. Over the course of my career and schooling,
04:41 18 yes. That's fair.

04:41 19 Q. And you'll agree with me that in doing a
04:41 20 regression, it's important that you measure the right
04:41 21 thing?

04:41 22 A. Yes. That's fair.

04:41 23 Q. Okay. During Dr. Goossen's testimony, do you
04:41 24 remember when counsel for SVV made a t-chart that had
04:41 25 solar on one side and display/backlight units on the

04:41 1 other side?

04:41 2 A. I remember that chart. Yes.

04:41 3 Q. Well, I'd like to zoom in on that t-chart just
04:41 4 a little bit and discuss it with you.

04:42 5 A. I think he had a display on the right side and
04:42 6 solar on the left. Oh. I see we're doing a new chart.
04:42 7 Got it.

04:42 8 Q. Good memory, Mr. Ferioli.

04:42 9 Now, I'd like to discuss the benefits of the
04:42 10 patents, like how using the patents benefits the
04:42 11 products. Is that okay?

04:42 12 A. Sure. We can do that.

04:42 13 Q. And it's your understanding that Dr. Farber
04:42 14 believes that the benefits of the patents extend to the
04:42 15 entire display, the entire product, right?

04:42 16 A. He said that yesterday, yes.

04:42 17 Q. You -- that -- you understand that's his
04:42 18 understanding?

04:42 19 A. Well, I didn't hear it from Dr. Credelle or
04:42 20 Dr. Vasylyev, but yes. That's what he said yesterday.

04:43 21 Q. Yesterday there was also some questions about
04:43 22 whether SVV's patents might help ASUS save money on
04:43 23 buttons.

04:43 24 Do you remember those?

04:43 25 A. Yes. I recall that discussion.

04:43 1 Q. I mean, you know this isn't a case about
04:43 2 buttons, right?

04:43 3 A. Yes. I know.

04:43 4 Q. You had the opportunity to review Dr. Farber's
04:43 5 opinion, and you understand he never talked about
04:43 6 buttons once in it, right?

04:43 7 A. Not that I can think of.

04:43 8 Q. Now, I think you might have just said you
04:43 9 didn't recall Dr. Vasylyev saying it, but he also
04:43 10 testified that he understood the technical benefits of
04:43 11 the patents, improve efficiency, allow for the size of
04:43 12 the bezel and the display to be reduced, allows for the
04:43 13 panels to be made uniform, increasing brightness.

04:43 14 Do you remember him testifying to that?

04:43 15 A. Yes. I remember him talking about those
04:43 16 general benefits. I don't agree with that part.

04:44 17 Q. You don't agree with Dr. Vasylyev's testimony?

04:44 18 A. Well, I didn't hear any part of his testimony
04:44 19 where he said it's the entire display.

04:44 20 Q. Okay. Do you disagree that if the
04:44 21 patents-in-suit allow for the size of the bezel on the
04:44 22 display to be reduced, then the benefits of the patents
04:44 23 would extend beyond the mere backlight unit?

04:44 24 A. Okay. That's what he said. I didn't hear
04:44 25 that part. Then under that assumption, yeah. We can

04:44 1 put --

04:44 2 Q. Now, I understand you disagree with it, but
04:44 3 I'm talking about what his testimony was.

04:45 4 Do you understand?

04:45 5 A. Yes. That's fair.

04:45 6 Q. Okay. Also, you heard Mr. Credelle testify on
04:45 7 Tuesday that you could use a smaller power supply
04:45 8 because the smaller LEDs would draw less power.

04:45 9 Do you remember that?

04:45 10 A. Yes. I remember.

04:45 11 Q. Okay. Now, you understand that the benefits
04:45 12 of the patents are limited to the backlight unit,
04:45 13 right?

04:45 14 A. Yes. That's where the benefits are conveyed
04:45 15 based on my understanding.

04:45 16 Q. And not all of the backlight unit, part of the
04:45 17 backlight unit, fair?

04:45 18 A. I don't think I -- well, I understand the
04:45 19 infringing parts are narrow components, but I don't
04:45 20 recall if I limited the benefits to a subcomponent.
04:46 21 But it's fair to say the backlight, yes.

04:46 22 Q. Okay. So it's your understanding that the --

04:46 23 A. The benefits are confined to the backlight.

04:46 24 Q. The benefits do not extend past the backlight,
04:46 25 and you don't know whether the benefits are something

04:46 1 smaller than the entire backlight; is that fair?

04:46 2 A. Yeah. I understand infringement is something
04:46 3 smaller and that the benefits convey confined within
04:46 4 the backlight. Yeah, that's fair.

04:46 5 Q. Now, you understand Dr. Farber's not a
04:46 6 technical expert?

04:46 7 A. Right. Just like I'm not.

04:46 8 Q. He got a Ph.D. in economics. He doesn't know
04:47 9 the technical ins and outs of monitors, fair?

04:47 10 A. Yes. That's fair.

04:47 11 Q. You are also not a technical expert?

04:47 12 A. Yes.

04:47 13 Q. So who do you rely on for your understanding
04:47 14 that the patents-in-suit, the benefits of the
04:47 15 patents-in-suit are limited to the backlight unit?

04:47 16 A. I rely on ASUS' technical experts.

04:47 17 Q. And what is the name of ASUS' technical expert
04:47 18 on whom you rely?

04:47 19 A. I believe that one was from Dr. Coleman.

04:47 20 Q. Okay. Have you ever built a house?

04:47 21 A. No. It sounds like it'd be fun, but I
04:47 22 haven't.

04:47 23 Q. You gave an analogy. You showed a picture of
04:47 24 some houses and some comparable prices.

04:47 25 Do you remember that?

04:47 1 A. Yes. I do.

04:47 2 Q. Okay. Do you understand that when you build a
04:47 3 house, maybe when you build a really nice house, you
04:47 4 have an architect that makes the designs and the
04:48 5 blueprints for the house, and you have contractors that
04:48 6 actually execute the building of the house.

04:48 7 Does that sound fair?

04:48 8 A. I don't have any reason to disagree. I've
04:48 9 never done it, but that sounds right to me.

04:48 10 Q. We don't have to use a house. There's some
04:48 11 sort of building that they use an architect for, right?

04:48 12 A. I can follow.

04:48 13 Q. And architects are not the people that show up
04:48 14 and actually do the building and the actual measuring?

04:48 15 A. No. As you said, they do the blueprint.

04:48 16 Q. You'll agree they're both important. You need
04:48 17 the architect to do a good job of planning what will be
04:48 18 built, and you need the contractors to do a good job of
04:48 19 executing what was planned, fair?

04:48 20 A. Yeah, sure.

04:48 21 Q. And you'll agree with me that in patent
04:48 22 damages, the person who decides what benefits the
04:48 23 damages expert will be measuring is the technical
04:48 24 expert, fair?

04:48 25 A. Yes. That's fair.

04:49 1 Q. Okay. So you'll agree that no matter how
04:49 2 great a job you or Dr. Farber did at executing,
04:49 3 measuring the thing they were trying to measure, if
04:49 4 they were trying to measure benefits that were wrong,
04:49 5 their opinions would just be wrong, right?

04:49 6 A. Can you say that one more time?

04:49 7 Q. Sure. Try to ask it in a more simple way.
04:49 8 Is it fair to say that the basic disagreement
04:49 9 between you and Dr. Farber is whether the patents in
04:49 10 this case have benefits that can affect the whole
04:49 11 monitor or have benefits that are limited to a small
04:49 12 part of the monitor?

04:49 13 A. I agree that's a starting point of the
04:50 14 disagreement, yes.

04:50 15 Q. That's a big part of the disagreement?

04:50 16 A. Yeah, that's fair. It's a big part.

04:50 17 Q. All right. And there's the \$14 and because
04:50 18 the \$21 is more than \$14, Dr. Farber's opinion is
04:50 19 impossible.

04:50 20 Do you remember that?

04:50 21 A. Yes.

04:50 22 Q. We'll get to that. But you will agree with me
04:50 23 that the major damages disagreement in this case is a
04:50 24 technical disagreement; is that fair?

04:50 25 A. That is a major disagreement, yes.

04:50 1 Q. Can you please identify Dr. Coleman in the
04:50 2 room for the jury?

04:50 3 A. I don't believe he's here.

04:50 4 Q. Where is he?

04:50 5 A. I have no idea.

04:50 6 Q. When is the last time you spoke with him?

04:50 7 A. Probably at the time that I was preparing my
04:50 8 report.

04:50 9 Q. Do you remember ASUS' counsel's extended
04:51 10 discussion of the parable of the wheat and the chaff
04:51 11 during opening?

04:51 12 A. Yes. I do.

04:51 13 Q. Do you know what the process is in this
04:51 14 courtroom for separating the wheat from the chaff?

04:51 15 A. No.

04:51 16 Q. Does cross-examination sound fair?

04:51 17 A. That would seem like a good way to do it.
04:51 18 Sure.

04:51 19 Q. Because you come and you get to tell your side
04:51 20 of the story, and then the other side gets to ask you
04:51 21 questions and see whether your ideas stand up to
04:51 22 examination, right?

04:51 23 A. Yeah, that's a fair description of
04:51 24 cross-examination.

04:51 25 Q. Do you know whether the jury in this case will

04:51 1 have the opportunity to test or examine the key ideas
04:51 2 of Dr. Coleman who informed you of what to be measuring
04:51 3 in this damages case?

04:51 4 A. Probably not because he's not here.

04:52 5 Q. And I'll promise you we could talk about this
04:52 6 one. Do you remember this one where you said the
04:52 7 average backlight panel cost is only \$14?

04:52 8 A. Are you asking me if I remember the slide or
04:52 9 remember --

10 Q. Yes.

04:52 11 A. And I do remember you said we would come here,
04:52 12 yes.

04:52 13 Q. Good. Memory's still good.

04:52 14 A. I try.

04:52 15 Q. I think you described it in part, but could
04:52 16 you describe in full for the jury the calculation that
04:52 17 you did to reach this \$14, and I'll see if I can write
04:52 18 the steps as you describe them.

04:53 19 A. Sure. So it starts with market reports from
04:53 20 KGI which provides the range of prices for display
04:53 21 panels. And the average -- I want to say it's from
04:53 22 2018 through 2022. And it was the prices for 24-inch
04:53 23 and 27-inch display panels. And the average price over
04:53 24 that time period was \$70. And then from there, I used
04:53 25 industry data.

04:53 1 Q. Wait. I'm sorry. I'm going to give you a
04:53 2 full opportunity to explain. I just want to make sure
04:53 3 I get the steps down.

04:53 4 It was 70 or it was 129?

04:53 5 A. Right now we're talking about the display
04:53 6 panel, right? Are you talking about the orange bar?

04:53 7 Q. No, no, no. I thought the 129 was somehow
04:53 8 related to the 14, but you don't think it is?

04:53 9 A. No. The 129 is from ASUS' sales data.

04:53 10 Q. Okay. Great. All right. So we started with
04:53 11 a \$70 display panel cost from KGI?

04:53 12 A. Yes.

04:53 13 Q. All right. What's the next step to reach \$14?

04:54 14 A. So the next step is industry data from Omdia
04:54 15 which shows the cost of the parts within the display
04:54 16 panel. And it showed that the backlight panel was less
04:54 17 than 20 percent of the cost within the display panel,
04:54 18 and so you take 20 percent of the 70, and that gets you
04:54 19 to \$14.

04:54 20 Q. Did you have any other sources for that
04:54 21 20 percent?

04:54 22 A. There were other conversations with
04:54 23 Dr. Coleman for it. Yes.

04:54 24 Q. Okay. And if that 20 percent actually is in
04:54 25 that Omdia document, you will at least agree with me

04:55 1 that you didn't show it to the jury?

04:55 2 A. I did not show them that 20 percent. It is in
04:55 3 there, though. Well, I mean, you have to calculate the
04:55 4 20 percent, but the pieces to get it are in there.

04:55 5 Q. And you relied on conversations with
04:55 6 Dr. Coleman for that, correct?

04:55 7 A. For certain elements of it, yes.

04:55 8 Q. Which elements?

04:55 9 A. To provide a general understanding, make sure
04:55 10 I was along the right path.

04:55 11 Q. Do you remember when -- during opening when
04:55 12 ASUS' counsel talked about a regression and sort of
04:56 13 associated a regression with political polls?

04:56 14 A. Yes. I remember them saying that.

04:56 15 Q. And then I went back to check to make sure
04:56 16 that I didn't -- to make sure that I don't misquote.
04:56 17 He said: Because here's the truth. Whoever's paying
04:56 18 for the poll gets whatever result they want.

04:56 19 Do you remember him saying that?

04:56 20 A. I don't remember exact words, but I can take
04:56 21 your word for it. That -- I have no reason to believe
04:56 22 that isn't what he said.

04:56 23 Q. Did it make you uncomfortable when counsel
04:56 24 argued to the jury that a regression is nothing more
04:56 25 than just paying an expert and he can just plop out

04:56 1 anything you want him to say?

04:56 2 A. Well, I don't think it would make me
04:56 3 comfortable or uncomfortable. It's just a statement.

04:56 4 Q. Well, I mean, ASUS is paying you, right?

04:56 5 A. Right.

04:56 6 Q. And you have a lot of experience with
04:56 7 regressions?

04:57 8 A. That's fair.

04:57 9 Q. And if Dr. Coleman was correct that the
04:57 10 benefits of the patents are in fact limited to the
04:57 11 backlight unit, there was nothing stopping you from
04:57 12 running your own regression to establish that, right?

04:57 13 A. Well, no. It couldn't be done like Dr. Farber
04:57 14 said yesterday.

04:57 15 Q. You think running a regression in this case is
04:57 16 impossible?

04:57 17 A. Well, no. Running a regression on the
04:57 18 backlight panel was impossible.

04:57 19 Q. Why is that?

04:57 20 A. We don't have the data for all of ASUS'
04:57 21 products, the backlight panel data.

04:57 22 Q. Why not?

04:57 23 A. It wasn't provided.

04:57 24 Q. Did you ask ASUS for it?

04:57 25 A. I don't think I did. No.

04:57 1 Q. Is there any information that you did ask ASUS
04:57 2 for in conducting your investigation into this case and
04:57 3 they said, no. I will not give you that information?

04:57 4 A. I'm not sure I asked them for anything. I
04:58 5 generally rely on what is produced. And if there's
04:58 6 something more I need to produce to get to my results,
04:58 7 I will follow up, but it wasn't necessary.

04:58 8 Q. Other than your decision that it was not
04:58 9 necessary, you agree with me there's nothing stopping
04:58 10 you from getting more information from your client,
04:58 11 right?

04:58 12 A. Sure.

04:58 13 Q. Okay. I would like to shift gears a little
04:58 14 bit and talk about your affirmative damages model where
04:58 15 you calculated what the damages should be based on the
04:58 16 Samsung SVV agreement. Is that okay?

04:58 17 A. Sure. We can do that.

04:58 18 Q. Earlier, I think when you were discussing the
04:59 19 Samsung SVV license, you mentioned when it was signed
04:59 20 and when ASUS was sued relative to that.

04:59 21 Do you remember that?

04:59 22 A. Yes.

04:59 23 Q. What's that relevant to in this case?

04:59 24 A. Well, it shows the time -- it shows that
04:59 25 the -- those ASUS products we're talking about with the

04:59 1 Samsung display panels. They're licensed. Well --
04:59 2 yes. Products using Samsung display panels would be
04:59 3 covered under that license.

04:59 4 Q. Okay. Do you disagree with Dr. Farber that
04:59 5 the license grant to Samsung did not become effective
04:59 6 until Samsung actually paid SVV?

04:59 7 A. I mean, agreements include a release for the
05:00 8 past. So it covers the past and the future, but I'll
05:00 9 say I'll agree that it's effective when that payment
05:00 10 goes through.

05:00 11 Q. And you understand that the payment was not
05:00 12 even due until 30 days after the license was signed,
05:00 13 right?

05:00 14 A. Right.

05:00 15 Q. And do you have any reason to disagree with
05:00 16 Dr. Farber's understanding that that payment was made
05:00 17 on that deadline?

05:00 18 A. I have no reason to disagree. No.

05:00 19 Q. And you understand that that deadline was
05:00 20 after notice was provided to ASUS of its infringement,
05:00 21 correct?

05:00 22 A. Sure.

05:00 23 Q. Do you remember this slide?

05:00 24 A. Yes. I do.

05:00 25 Q. And it says that you calculated a lump sum

05:00 1 through trial.

05:00 2 Do you see that?

05:00 3 A. Yes. I do.

05:00 4 Q. And also above that, it says: January 30th,
05:01 5 2018, through August 31st, 2024.

05:01 6 Do you see that?

05:01 7 A. Yes.

05:01 8 Q. What is today's date?

05:01 9 A. I'm actually really bad at dates, but it's
05:01 10 September something.

05:01 11 Q. Does September 25th sound right?

05:01 12 A. Can I take your word for it?

05:01 13 Q. Sure.

05:01 14 A. I'm really bad at dates.

05:01 15 Q. What does "lump sum through trial" mean?

05:01 16 A. Well, a lump sum is just an upfront payment,
05:01 17 and it's for the term of a agreement. So if the
05:01 18 agreement is through August 31st, 2024, that means a
05:01 19 lump sum covering through that time period.

05:01 20 Q. Okay. So you calculated damages through
05:01 21 August 31st, 2024, fair?

05:01 22 A. Yes. That's fair.

05:01 23 Q. Which was almost a month ago?

05:01 24 A. Sure.

05:01 25 Q. So under your calculations, it's sort of a

05:01 1 infringe for six years, get one month for free
05:01 2 situation, right?

05:01 3 A. Not really.

05:02 4 Q. What is your theory on how much ASUS should
05:02 5 pay for September 1st, 2024, through September 25th,
05:02 6 2024?

05:02 7 A. Well, generally after whatever decision is
05:02 8 made, they would update sales through the present.
05:02 9 August is just the date through which we have sales at
05:02 10 the moment because that's the most recent date the
05:02 11 sales data was available.

05:02 12 Q. And you understand Dr. Farber had the capacity
05:02 13 and did project sales through the beginning of trial,
05:02 14 right?

05:02 15 A. Yes. He did.

05:02 16 Q. And that's not unusual?

05:02 17 A. No. It's not.

05:02 18 Q. And there was nothing stopping you from doing
05:02 19 the same, right?

05:02 20 A. Right. There wasn't.

05:02 21 Q. Simple math?

05:02 22 A. Right.

05:02 23 Q. Okay. I'd like to talk to you about this
05:02 24 slide.

05:02 25 Do you remember this slide?

05:02 1 A. Yes. I do.

05:03 2 Q. This is sort of one of your key slides because
05:03 3 on it, you show the jury how you calculated what could
05:03 4 be called an effective royalty rate from the
05:03 5 SVV-Samsung agreement, fair?

05:03 6 A. Yeah. That's fair.

05:03 7 Q. And this is your starting point. From here,
05:03 8 you made a few adjustments, right?

05:03 9 A. Yes. That's fair.

05:03 10 Q. Okay. I'd like to discuss the starting point
05:03 11 first, and then we'll discuss the adjustments. Is that
05:03 12 okay?

05:03 13 A. Sure.

05:03 14 Q. All right. I believe you said this 177
05:03 15 million figure you took from publicly available
05:03 16 information that was estimates of Samsung's sales; is
05:03 17 that correct?

05:03 18 A. Yeah. Estimates of historical sales and
05:03 19 forecasts of future sales. That's right.

05:03 20 Q. Okay. Future sales too. Right. I remember
05:03 21 you saying that.

05:03 22 So that's into the past and all the way until
05:04 23 the expiration of the patents, right?

05:04 24 A. Yes. The term of the agreement. That's
05:04 25 correct.

05:04 1 Q. Right. Which is 2030 or 2031, somewhere in
05:04 2 there, right?

05:04 3 A. September. I want to say it was 2033.

05:04 4 Q. Okay. So you'll agree that as we stand here
05:04 5 today, we do not know how many licensed sales Samsung
05:04 6 will have between now and 2033, right?

05:04 7 A. Yeah. That's fair. I mean -- yeah.

05:04 8 Q. And I -- and I believe this licensed sales --
05:04 9 I believe you said this -- was limited to this publicly
05:04 10 available information of Samsung's TV and monitor
05:04 11 sales, right?

05:04 12 A. Yes. It was.

05:04 13 Q. So you made -- so, you know, you made an
05:04 14 attempt to put into the denominator here, the licensed
05:05 15 sales denominator, the Samsung units that actually use
05:05 16 SVV's patents, right?

05:05 17 A. I put in there the products that were
05:05 18 licensed.

05:05 19 Q. No. You didn't put in washing machines,
05:05 20 right?

05:05 21 A. Correct.

05:05 22 Q. And you didn't put in dryers?

05:05 23 A. Right. I didn't.

05:05 24 Q. Refrigerators, out?

05:05 25 A. Right.

05:05 1 Q. Okay. So you made an attempt to focus this
05:05 2 licensed sales numbers on the Samsung units that would
05:05 3 be using SVV's technology, right?

05:05 4 A. I focused on the ones that were covered in the
05:05 5 litigation. Yes.

05:05 6 Q. Okay. But you didn't -- you didn't do it by
05:05 7 model number, right? You just did overall sales?

05:05 8 A. That's correct.

05:05 9 Q. Uh-huh. And it is your understanding that not
05:05 10 every LCD display device from Samsung includes the
05:06 11 patented technology, right?

05:06 12 A. That's right.

05:06 13 Q. And you remember Mr. Lee couldn't identify any
05:06 14 particular Samsung models that use SVV's patents,
05:06 15 correct?

05:06 16 A. Sure.

05:06 17 Q. So you don't have any evidence about which
05:06 18 particular Samsung products actually use SVV's
05:06 19 technology, right?

05:06 20 A. Yeah. Sure.

05:06 21 Q. Okay. And there -- ASUS didn't send a
05:06 22 subpoena to Samsung to get that information from them,
05:06 23 right?

05:06 24 A. Not that I'm aware of. No.

05:06 25 Q. And you know what a subpoena is, right?

05:06 1 A. Yes.

05:06 2 Q. So it's a thing where in litigation, you can
05:06 3 send a request to a third party, and they'll be
05:06 4 required to give you information, right?

05:06 5 A. That sounds right.

05:06 6 Q. And that didn't happen?

05:06 7 A. Right. Not that I'm aware of.

05:06 8 Q. So you'll agree with me that we don't actually
05:07 9 know how many Samsung licensed sales actually use SVV's
05:07 10 technology, right?

05:07 11 A. Yeah. We don't know which ones use it.
05:07 12 That's right.

05:07 13 Q. But we do know that it's something lower than
05:07 14 177 million, right?

05:07 15 A. I don't necessarily agree with that.

05:07 16 Q. It is your understanding that not every LCD
05:07 17 display device from Samsung includes the patented
05:07 18 technology, right?

05:07 19 A. Right. I agree with that.

05:07 20 Q. And that number purports to be every LCD
05:07 21 display device that's a monitor or a TV from Samsung,
05:07 22 right?

05:07 23 A. Right. Based on that data. Yes.

05:07 24 Q. Do you think that every single Samsung TV or
05:07 25 monitor actually uses SVV's technology?

05:08 1 A. No.

05:08 2 Q. Okay. So we'll agree that whatever the actual
05:08 3 number is here, it's lower than 177 million, at least
05:08 4 for TVs and monitors, right?

05:08 5 A. Not necessarily.

05:08 6 Q. Because even though you knew that not every
05:08 7 Samsung TV and monitor used SVV's technology, the way
05:08 8 you solved that uncertainty was by including every
05:08 9 single Samsung monitor and TV in the denominator here,
05:08 10 right?

05:08 11 A. I'm not sure I describe it that way.

05:08 12 Q. You did include the best information you had
05:08 13 about every single Samsung TV and monitor in this
05:09 14 denominator, didn't you, sir?

05:09 15 A. Right. Yeah. I did that.

05:09 16 Q. So you artificially increased the size of this
05:09 17 denominator, right?

05:09 18 A. No. I wouldn't agree with that.

05:09 19 Q. How about this? You will agree with me on the
05:09 20 basic math principle that if this denominator of
05:09 21 licensed sales gets bigger, this amount of money per
05:09 22 unit gets smaller, right?

05:09 23 A. Yeah. I can agree with that.

05:09 24 Q. And if the amount of money per unit that you
05:09 25 were calculating from the SVV-Samsung agreement was

05:09 1 smaller, that would help ASUS, right?

05:09 2 A. Yeah. If that was a smaller number in the
05:09 3 denominator, you'd get a --

05:09 4 Q. No. If there's a bigger number, the
05:09 5 denominator --

05:09 6 (Simultaneous conversation.)

05:09 7 A. Wait. I was working in the wrong direction
05:09 8 there. It was confusing me.

05:09 9 Yeah. If there's a bigger number in the
05:09 10 denominator, you'll get a smaller number on the side.
05:10 11 And yes. That would, other things equal, make a
05:10 12 smaller royalty payment.

05:10 13 BY MR. PEARSON:

05:10 14 Q. If you don't know the denominator, you can't
05:10 15 solve the equation, right? That's simple?

05:10 16 A. Well, I mean, you can't divide by zero, so
05:10 17 yeah.

05:10 18 Q. I've never been good with seeing percentages
05:10 19 of revenue written as a percentage. So this -- if you
05:10 20 take away the percentage symbol, what this means as a
05:10 21 number is that, as a number, right?

05:10 22 A. Honestly, I'm better at reading percentages,
05:10 23 but that looks right to me.

05:10 24 Q. So 0.018 percent equals, as a number, 0.00018,
05:10 25 right?

05:10 1 A. That sounds right.

05:10 2 Q. And what is 0.00018 times \$140?

05:11 3 A. I'm assuming 2.5 cents because it's just the
05:11 4 reverse math.

05:11 5 Q. Okay. And then what's the average price of a
05:11 6 Samsung monitor?

05:11 7 A. The average price? I don't know. I used the
05:11 8 minimum.

05:11 9 Q. And if you used the minimum, that makes it as
05:11 10 low as it can go, right, in your calculation?

05:11 11 A. No. It's actually the opposite. Using the
05:11 12 minimum makes the percentage larger, so it gives SVV a
05:11 13 larger payment.

05:11 14 Q. Okay. So sometimes you do things to help
05:11 15 ASUS, and sometimes you do things to help SVV; is that
05:11 16 fair?

05:11 17 A. No. I wouldn't agree with that at all. I
05:11 18 tried to be conservative on every occasion possible.
05:11 19 So I would say I helped SVV in every step that I could.

05:11 20 Q. Well, I would propose there's some uncertainty
05:11 21 about your starting point, but I would like to discuss
05:12 22 with you where you went from there.

05:12 23 A. Okay.

05:12 24 Q. So you got the starting point at .018 percent
05:12 25 of revenues, and you made some adjustments before you

05:12 1 came up with your ultimate conclusion, right?

05:12 2 A. Yeah, that's a fair assessment.

05:12 3 Q. And this slide has a few adjustments on it,
05:12 4 but in your opinion, when you wrote it out and you
05:12 5 considered all the Georgia-Pacific factors, you made a
05:12 6 few more adjustments. In fact, you adjusted for seven
05:12 7 of the Georgia-Pacific factors, right?

05:12 8 A. Right. I narrowed it down to the more
05:12 9 important ones to streamline the testimony.

05:12 10 Q. Which I'm sure everyone appreciates.

05:12 11 Okay. How much did you adjust -- "adjust"
05:12 12 means like change, right?

05:12 13 A. Yeah, adjust up, adjust down.

05:12 14 Q. Yeah. Okay. How much did you change up or
05:13 15 down the starting point of .018 percent for litigation
05:13 16 settlement agreements?

05:13 17 A. Well, it doesn't work that way. Remember I
05:13 18 said I do upwards and downwards and then view them as a
05:13 19 whole. So I can say that it went from .018 to .05, but
05:13 20 I don't have an individual amount for each one.

05:13 21 Q. So there was no steps?

05:13 22 A. Well, no. There was steps. I figured out
05:13 23 which ones were up and which ones were down and then
05:13 24 considered them all together with the various facts
05:13 25 that go into them.

05:13 1 Q. How much does it go up for litigation
05:13 2 settlement agreement?

05:13 3 A. Well, I'm trying to tell you, I don't do them
05:13 4 individually other than identifying up or down. I do
05:13 5 it holistically.

05:13 6 Q. So I assume you also cannot tell me how much
05:13 7 you adjusted it down for fewer licensed patents, right?

05:14 8 A. That's fair.

05:14 9 Q. You spent a lot of time talking to the jury
05:14 10 about how many patents were licensed during
05:14 11 the -- through the SVV-Samsung agreement, right?

05:14 12 A. Right. It was 14, I believe.

05:14 13 Q. Uh-huh. You focused on that a lot, fair?

05:14 14 A. I'm not sure I'd say I focused on it. It's
05:14 15 one of the facts I presented.

05:14 16 Q. When you got to the end, it just kind of went
05:14 17 into an amorphous adjustment, just sort of a "trust
05:14 18 me," right?

05:14 19 A. Well, not really. I described the upwards and
05:14 20 downwards. And they have their numerical inputs, but
05:14 21 you consider everything as a whole.

05:14 22 Q. That's what I'm trying to understand. What
05:14 23 are the numerical inputs? How did you do the
05:14 24 calculations?

05:14 25 A. Oh, I understand. Well, I can't tell you a

05:14 1 specific one for each, but I can guide you through the
05:14 2 numerical inputs if that's what you want to know.

05:14 3 Q. Yeah. I want to know how much you adjusted
05:14 4 for any one of these four individual things.

05:14 5 A. How about I try and walk you through one and
05:14 6 we'll see? Is that helpful? Can I try and do that?

05:14 7 Q. Sure. How much did you adjust the
05:15 8 .018 percent of revenues down for fewer licensed
05:15 9 patents?

05:15 10 A. Sure. So your starting understanding is one
05:15 11 as 14 and one as 4, so that's about a third. But you
05:15 12 don't do a one-third adjustment because not all patents
05:15 13 are equal. And these patents have similar
05:15 14 technologies, and so I do something less than that.

05:15 15 I consider that as my starting line and know
05:15 16 that I should do something less. And that's what I
05:15 17 have in mind for that downward adjustment when I
05:15 18 consider it with all the others.

05:15 19 Q. So in your opinion, some of the SVV patents in
05:15 20 the Samsung agreement are more important than the
05:15 21 others and that somehow fit into your calculations?

05:15 22 A. Well, I wouldn't phrase it that way. I'm
05:15 23 saying I can't assume they're all equal, and so as a
05:15 24 conservative measure, I wouldn't just do one-third; I'd
05:15 25 do something less. But that also -- so I left the

05:16 1 baselines that go into it.

05:16 2 Q. Okay. And what was your calculation for the
05:16 3 next one? How much did you go down for fewer licensed
05:16 4 products?

05:16 5 A. It's the same general idea. You have just the
05:16 6 monitors on one side, and on the other side you have
05:16 7 the products that were licensed by Samsung. And you'd
05:16 8 look at the smartphones, tablets, display panels, and
05:16 9 notebooks are the ones you'd consider for that, because
05:16 10 we've already counted for television and monitors when
05:16 11 we do our ERR, which is the effective royalty rate.

05:16 12 And so you don't know the number of sales of
05:16 13 them. So you know it's downward. And you're not going
05:16 14 to do something at 25 percent, but that's your starting
05:16 15 point. So you know as a conservative measure, you
05:16 16 don't go down to there. It's something higher,
05:16 17 something lower.

05:16 18 Q. Do you go down by like 40 times?

05:16 19 A. No. Of course not. 40 times is from the
05:16 20 televisions and the monitors. The one we're talking
05:16 21 the comparison of licensed sales there, that's already
05:16 22 been taken care of when we figure out that
05:16 23 0.018 percent. Right now we're just comparing -- ASUS
05:17 24 has monitors and Samsung still is getting a license to
05:17 25 those display panels, tablets, smartphones, and

05:17 1 notebooks.

05:17 2 Q. So how much did you adjust down for fewer
05:17 3 licensed products?

05:17 4 A. Something less than one-fourth. That's the
05:17 5 baseline for consideration as I look at all of them
05:17 6 together.

05:17 7 Q. All right. What about how far did you adjust
05:17 8 down for using less technology?

05:17 9 A. That one's more difficult to measure because
05:17 10 it's two of the patents and so a slight downward
05:17 11 adjustment.

05:17 12 Q. So you started with .018 percent and you ended
05:17 13 up higher, yeah? Just -- I don't know -- just to seem
05:17 14 believable?

05:17 15 A. Well, do you want me to go through the first
05:17 16 one?

05:17 17 Q. Sure. I mean, I tried earlier; you didn't
05:17 18 know it. But if you know it now, I guess let's hear
05:18 19 it.

05:18 20 A. Well, no. Earlier, you asked for the exact
05:18 21 amount. I can give you the baseline for the upward.

05:18 22 Q. Whatever you think.

05:18 23 A. Sure. So data published by
05:18 24 PricewaterhouseCoopers in 2018, which is the time of
05:18 25 the hypothetical negotiation, showed that entities like

05:18 1 SVV faced about a one-third chance of success in
05:18 2 litigation, so your baseline is a one-third chance of
05:18 3 success.

05:18 4 And so from that, a tripling of the payment
05:18 5 would be your starting line. Now, it could be higher;
05:18 6 it could be lower. But that's the baseline for
05:18 7 consideration on the upward.

05:18 8 Q. Will you at least agree with me that whatever
05:18 9 happened between .018 percent of revenues and
05:18 10 .05 percent of revenues didn't happen with a lot of
05:18 11 mathematical precision?

05:18 12 A. I'd say they have numerical inputs, but not
05:18 13 everything can be that precise. You have to take a
05:19 14 degree of judgment.

05:19 15 MR. PEARSON: Your Honor, with the
05:19 16 reservation that I'm going to mark these slides as
05:19 17 demonstratives, I pass the witness.

05:19 18 MR. SIEGMUND: If we go to PDX-4.23 real
05:19 19 quick.

05:19 20 REDIRECT EXAMINATION
05:19 21 BY MR. SIEGMUND:

05:19 22 Q. All right, sir. You were asked a couple
05:19 23 questions about the slide.

05:19 24 Do you remember that?

05:19 25 A. Yes. I do.

05:19 1 Q. Why is it more appropriate to use the
05:19 2 consolidated financial statements?

05:19 3 A. Well, if you remember that chart that had ASUS
05:19 4 at the top and all the different organizations -- well,
05:19 5 actually, you don't even have to remember that.

05:19 6 The important thing to understand is remember
05:19 7 underneath ASUS, there was ACI, that U.S. subsidiary?
05:19 8 The thing is ASUS at the top doesn't actually sell
05:19 9 their products. Their subsidiaries do, and so -- I
05:20 10 guess they can't see the table.

05:20 11 So if you recall, I calculated gross profit,
05:20 12 and then I have to deduct selling expenses. And so if
05:20 13 I look at just ASUSTeK's financials, we're not going to
05:20 14 see those selling expenses because at the top, ASUS
05:20 15 doesn't sell it; its subsidiary ACI does. And that's
05:20 16 why you have to use consolidated, so you can find those
05:20 17 selling expenses.

05:20 18 MR. SIEGMUND: Okay. Let's go to
05:20 19 PDX-4.26.

05:20 20 BY MR. SIEGMUND:

05:20 21 Q. All right. You were asked a couple of
05:20 22 questions about this, several, I think.

05:20 23 So why is it correct in your view not to start
05:20 24 with the total cost of a monitor?

05:20 25 A. Because the monitor still has all those parts

05:20 1 and features that have nothing to do with the patented
05:20 2 technology.

05:20 3 Q. Okay. And there's some discussion about the
05:20 4 backlight panel and how you got that data. Is that
05:20 5 data that you got from the backlight panel reliable?

05:20 6 A. Yes. It is. It's from Omdia and KGI. These
05:21 7 are large institutions that provide these types of
05:21 8 data. And economists and others regularly rely on
05:21 9 these sort of inputs from them.

05:21 10 Q. Okay. And again, why start with the backlight
05:21 11 panel cost?

05:21 12 A. Because that is what the patents benefit.
05:21 13 And, you know, when we heard from Dr. Vasylyev and
05:21 14 Dr. Credelle, when they actually identify cost savings,
05:21 15 they talked about things like the light guide, the
05:21 16 LEDs. Those are all in the backlight panel.

05:21 17 Q. Okay. Let's go to your opinion. There's some
05:21 18 discussion about the Samsung sales estimate.

05:21 19 A. Actually, can we circle back to that last one?

05:21 20 Q. Absolutely.

05:21 21 A. I just remember, you know, they also mentioned
05:21 22 something called the power supply or the PCB. And even
05:21 23 if you add the cost for those, it doesn't get you to
05:21 24 22. Your new total cost becomes something like \$17,
05:21 25 not 14. So either way, you're still exceeding total

05:22 1 costs.

05:22 2 Q. Okay. Thank you, sir.

05:22 3 Let's go to the discussion about the sales,
05:22 4 the Samsung sales estimate which is a part of your
05:22 5 opinion, is that right, your affirmative opinion?

05:22 6 A. Yes.

05:22 7 Q. Okay. Now, I believe you agreed with opposing
05:22 8 counsel that you didn't know whether Samsung used the
05:22 9 patented technology in those licensed sales; is that
05:22 10 fair?

05:22 11 A. Yeah. That's fair.

05:22 12 Q. Okay. Why don't you need to know if the sales
05:22 13 used the patented technology?

05:22 14 A. Because that's what's covered by the license.
05:22 15 That's what SVV sued them for. And so that's what the
05:22 16 license is covering.

05:22 17 Q. Okay. And how do you know that?

05:22 18 A. Because we have the Samsung complaint and the
05:22 19 Samsung agreement.

05:22 20 Q. All right. Now, there's also, I think, some
05:22 21 suggestion that your estimate for the Samsung licensed
05:22 22 sales was too large.

05:22 23 Do you remember that?

05:22 24 A. Yes. At the end of the day, that's where the
05:22 25 criticisms were heading.

05:22 1 Q. Okay. Now, do you agree that you
05:22 2 overestimated Samsung's licensed sales?

05:23 3 A. No. Absolutely not.

05:23 4 Q. Why?

05:23 5 A. Because my number was actually very
05:23 6 conservative. It's the first -- remember, I used data
05:23 7 from five different sources, and these data provided
05:23 8 their own different estimates. And so when looking
05:23 9 across each of these sources, I chose the smallest
05:23 10 number, the most conservative one.

05:23 11 So what I estimate wasn't just Samsung
05:23 12 licensed sales. It was Samsung minimum licensed sales.

05:23 13 But that's not all I did. I took it one step
05:23 14 further. Because as Mr. Pearson said, you know, this
05:23 15 agreement goes into the future, and the future's
05:23 16 uncertain.

05:23 17 So what the data showed was that the minimum
05:23 18 number of licensed sales for Samsung was actually
05:23 19 255 million units. I discounted that down to
05:23 20 177 million because the future's uncertain.

05:23 21 And then there's one more thing to consider.
05:23 22 Remember that denominator. It only has monitors and
05:23 23 televisions in it. It doesn't have any of those other
05:23 24 products.

05:23 25 It also doesn't have, remember, those products

05:24 1 that Samsung sold display panels to and got into other
05:24 2 companies' products which would also be in the
05:24 3 denominator.

05:24 4 Q. Okay. Last couple of questions.

05:24 5 There's some questions asked about your
05:24 6 adjustments.

05:24 7 Do you remember that?

05:24 8 A. Yes. I do.

05:24 9 Q. And just to reorient everybody, that's the
05:24 10 market approach that we're talking about?

05:24 11 A. Yes. It is.

05:24 12 Q. Is that approach used by economists in cases
05:24 13 like this across the world?

05:24 14 A. Yes. All the time.

05:24 15 Q. Okay. That's something that Dr. Farber used
05:24 16 as well, isn't it?

05:24 17 A. Yes. It is.

05:24 18 Q. Okay. And is it something that's just
05:24 19 randomly amorphous?

05:24 20 A. No. It's not. It relies on a combination of
05:24 21 quantitative and qualitative inputs, because not
05:24 22 everything can be scientifically precise.

05:24 23 MR. SIEGMUND: Okay. Thank you, sir.

05:24 24 No further questions, Judge.

05:24 25 RE CROSS-EXAMINATION

05:24 1 BY MR. PEARSON:

05:25 2 Q. Your starting point was the damages cannot
05:25 3 exceed the cost of the backlight unit because
05:25 4 Dr. Coleman told you that, right?

05:25 5 A. Yes. That's my understanding from
05:25 6 Dr. Coleman.

05:25 7 Q. That's not your opinion?

05:25 8 A. No. It's Dr. Coleman's opinion.

05:25 9 Q. He's not coming, right?

05:25 10 A. Right. He's not here.

05:25 11 Q. There's zero evidence in the record in this
05:25 12 case that any current Samsung product is actively using
05:25 13 SVV's technology right now, correct?

05:25 14 A. I'm not sure how you would prove that. I
05:25 15 mean, they're licensed. I guess yeah. I'm sorry.
05:26 16 There's nothing in the record.

05:26 17 Q. And you understand from ASUS' corporate
05:26 18 testimony that they're not even considering going in a
05:26 19 different direction with their infringing monitors, not
05:26 20 even considering alternatives, right?

05:26 21 A. I'm not sure that's entirely right. Didn't
05:26 22 they say something about heading towards OLED?

05:26 23 Q. Did you talk to them about that?

05:26 24 A. No. Isn't that what they testified this week?

05:26 25 Q. Is that part of your opinion in this case?

05:26 1 A. No. But you asked me.

05:26 2 Q. And in the opinion that you presented to the
05:26 3 jury, you said nothing about damages being limited by
05:26 4 any alternative that ASUS allegedly has, right?

05:26 5 A. Right. No. I didn't go into that.

05:26 6 MR. PEARSON: Pass the witness,
05:26 7 Your Honor.

05:26 8 MR. SIEGMUND: Nothing further,
05:26 9 Your Honor.

05:26 10 THE COURT: Thank you, sir. You may step
05:27 11 down.

05:27 12 MR. BURESH: Your Honor, defendant rests.

05:27 13 THE COURT: Very good.

05:27 14 Ladies and gentleman of the jury, if
05:27 15 you'll be back tomorrow, we'll get started at 8:30.
05:27 16 The bad news is you'll be greeted by me reading to you
05:27 17 for about an hour the Court's charge on the law.

05:27 18 And the good news is, my -- I think my
05:27 19 favorite part of a trial, which is hearing the lawyers'
05:27 20 closing arguments.

05:27 21 Now, let me remind you, and I'll remind
05:27 22 you tomorrow when I give you the charge, the evidence
05:27 23 is now complete. You have all the evidence you're
05:27 24 going to hear. Tomorrow's arguments are --

05:27 25 MR. CALDWELL: Sorry. I do not mean to

05:27 1 interrupt you by any means. There was just one other
05:27 2 thing we had talked about, and I wonder if we could
05:27 3 approach.

05:27 4 THE COURT: We'll take that up when
05:28 5 they're done, and I'll deal with it in the morning.

05:28 6 MR. CALDWELL: Perfect.

05:28 7 THE COURT: So subject to some
05:28 8 housekeeping, the evidence -- my point is this:
05:28 9 Tomorrow's closing arguments are just arguments.
05:28 10 They're the opinions of the counsel. And so -- but the
05:28 11 evidence comes from the jury box.

05:28 12 So with that being said, have a good
05:28 13 evening. We'll see you tomorrow at 8:30. And I'll do
05:28 14 the jury charge. I'll read that to you. You'll have
05:28 15 closing arguments, and then you'll begin your
05:28 16 deliberations.

05:28 17 THE BAILIFF: All rise.

05:28 18 (Jury exited the courtroom.)

05:28 19 THE COURT: You may be seated.

05:28 20 Let's go ahead and have the directed
05:29 21 verdict motions, and then we'll take up your issue.
05:29 22 Because if it's -- if it's the plaintiff's issue, it'll
05:29 23 be in your case now that the defense case is done.

05:29 24 Does the plaintiff have any motions to
05:29 25 make?

05:29 1 MR. SIEGMUND: Do you want to hear from
05:29 2 us first, Your Honor?

05:29 3 THE COURT: I don't know what motion you
05:29 4 would make on Rule 50 at this time.

05:29 5 MR. SIEGMUND: We would just reiterate.

05:29 6 THE COURT: Oh, I'm sorry. Since they're
05:29 7 not going to have an invalidity case, I'll hear -- but
05:29 8 I'll hear yours after I hear from the plaintiff.

05:29 9 MR. SIEGMUND: Okay.

05:29 10 MS. HALEY: Your Honor, we had one issue,
05:29 11 and that is in the joint pretrial order, the issue of
05:29 12 invalidity was joined --

05:29 13 THE COURT: I can't hear you.

05:29 14 MS. HALEY: Sorry?

05:29 15 THE COURT: I can't hear you.

05:29 16 MS. HALEY: Can you hear me now?

05:29 17 THE COURT: Yes, ma'am.

05:29 18 MS. HALEY: Okay. In the jury pretrial
05:30 19 order, the issue of invalidity was joined but wasn't
05:30 20 tried in the case. And I wasn't sure if you wanted to
05:30 21 deal with that as a JMOL on their invalidity defense or
05:30 22 with a dismissal.

05:30 23 THE COURT: I'm going to direct a verdict
05:30 24 on validity.

05:30 25 MS. HALEY: Okay. That's it. Thank you.

05:30 1 THE COURT: And so do you have any other
05:30 2 motions -- Rule 50 motions?

05:30 3 MS. HALEY: Plaintiffs do not.

05:30 4 THE COURT: Okay. Now -- and go ahead,
05:30 5 Mr. Siegmund. I'll hear from you subject to taking up
05:30 6 the issue that we talked about regarding the -- I'll
05:30 7 call it the microscope issue.

05:30 8 MR. SIEGMUND: To save everyone time,
05:30 9 Your Honor, we just re-urge the motions that we
05:30 10 previously brought up with the Court.

05:30 11 THE COURT: Okay. Those will be
05:30 12 respectfully overruled.

05:30 13 And now I'll hear what the plaintiff
05:30 14 wants to do, if anything, with regard to the issue
05:30 15 about slides. And it'd be better if you came up to the
05:30 16 lectern. I can hear you better.

05:30 17 MR. CALDWELL: Well, and I -- obviously I
05:31 18 didn't mean to interrupt you. I hope you didn't take
05:31 19 that as disrespectful.

05:31 20 THE COURT: I want -- it's you all's
05:31 21 record. Y'all -- I'm never offended that y'all are
05:31 22 trying to protect your record.

05:31 23 MR. CALDWELL: I just heard you saying
05:31 24 that the evidence was closed and that's why I -- why I
05:31 25 wanted to stand up.

05:31 1 THE COURT: Right.

05:31 2 MR. CALDWELL: The microscope that was
05:31 3 used here is the one that created those images, and so
05:31 4 I think to address --

05:31 5 THE COURT: Who did it?

05:31 6 MR. CALDWELL: Mr. Credelle, our expert.

05:31 7 And so I think actually there's also a
05:31 8 lot of attorney argument to know you've probably had
05:31 9 enough of it this week. But I think to address the
05:31 10 statement by their expert that it just can't have been
05:31 11 done with his microscope, we were going to put him on
05:31 12 to ask that question and have him contradict it. If we
05:31 13 can do that in the morning --

05:31 14 THE COURT: We can do that.

15 MR. CALDWELL: Okay.

05:31 16 THE COURT: I mean, if he did it and he's
05:31 17 going to get up and say I did it, then he gets to say
05:31 18 that.

05:31 19 MR. CALDWELL: Yes. Okay.

05:31 20 THE COURT: Okay.

05:31 21 Anything else?

05:31 22 MR. CALDWELL: Not from the plaintiff.

05:32 23 MR. BURESH: Your Honor, just to clarify,
05:32 24 any rebuttal would be limited in scope to showing that
05:32 25 he --

05:32 1 THE COURT: He's rebutting the issue you
05:32 2 raised about whether or not it could be -- your witness
05:32 3 said, I don't think it's possible that microscope could
05:32 4 have done that. He's going to get on the witness stand
05:32 5 and say it is possible because I did it. And that's
05:32 6 what he's limited to tomorrow.

05:32 7 MR. CALDWELL: Yes, sir.

05:32 8 MR. BURESH: And that was my simple --
05:32 9 the clarification is that we're limited in scope to
05:32 10 that.

05:32 11 THE COURT: That's all we're doing.

05:32 12 MR. CALDWELL: Yes, sir.

05:32 13 MR. BURESH: Nothing further from
05:32 14 defendant, Your Honor.

05:32 15 THE COURT: Yes, sir.

05:32 16 MR. PEARSON: I apologize, Your Honor.
05:32 17 One minor thing.

05:32 18 I believe earlier this week, you said you
05:32 19 had a new procedure for exchanging closing slides, and
05:32 20 if we could --

05:32 21 THE COURT: Yeah. I was about to take
05:32 22 that up. Thank you.

05:32 23 And so I will give you all a choice, I've
05:32 24 decided. If you all would prefer to not exchange
05:33 25 slides, I think that will be fine with this caveat: I

05:33 1 was taken off guard, frankly. I didn't expect in a
05:33 2 trial for one side to use a slide in closing that I had
05:33 3 actually literally kept out of evidence. So I was --
05:33 4 that took me off guard.

05:33 5 And so I don't think it made a
05:33 6 difference. I mean, I'll ramble here for a second.
05:33 7 You know, at one hearing before a trial once, we had a
05:33 8 big fight over some slide. And I offered to bet one of
05:33 9 the lawyers a thousand dollars if 15 minutes after the
05:33 10 opening any juror could remember the slide that they
05:33 11 were so worried about. And he didn't take that bet.

05:33 12 But -- so I am -- I am -- you all care
05:33 13 way more about it, I think, than the jury does.

05:33 14 That being said, if you all would prefer
05:33 15 to not exchange slides, that's fine, but if I have
05:34 16 to -- if someone makes an objection that's sustained, I
05:34 17 intend to make it very clear with the jury how I feel
05:34 18 about it.

05:34 19 On the other hand, we can exchange -- you
05:34 20 can exchange them, and if there are objections, I'll
05:34 21 take them up in the morning. I'll do either -- I'll do
05:34 22 it either way.

05:34 23 MR. CALDWELL: I think perhaps what we
05:34 24 had sort of in the orders for procedure that had been
05:34 25 exchanged in this case is something that we've used

05:34 1 before because I had a similar sort of thing in a trial
05:34 2 one time where someone was using some things that had
05:34 3 been excluded and whatnot. And so since then, what
05:34 4 I've tried to do is put in our procedures that at least
05:34 5 when we get up to go start closing, we give them the
05:34 6 slides.

05:34 7 THE COURT: Oh, no, no. That is
05:34 8 definitely what will happen.

05:34 9 MR. CALDWELL: So what I was thinking is
05:34 10 maybe in the morning, so we're not -- nobody's up all
05:35 11 night like scheming on reverse engineering the other
05:35 12 guy's thing or whatever, maybe right before we start
05:35 13 closing, a couple minutes before we can exchange --

05:35 14 THE COURT: Look, I'm happy to have you
05:35 15 all exchange them at the -- since I'm doing the charge
05:35 16 anyway, if you all want to exchange them at the
05:35 17 beginning of the charge, you'll have that time while
05:35 18 I'm reading to go through them. And that seems to me
05:35 19 to be a -- and then if there is an issue from anyone, I
05:35 20 can take a break after the charge and I can take up the
05:35 21 issue. And maybe that's the best way to do it.

05:35 22 MR. BURESH: I agree with that, and I
05:35 23 would just say, any slides that are just excerpts of
05:35 24 trial testimony, in other words, transcript
05:35 25 recitations, that we don't need to exchange those.

05:35 1 Other than that, we exchange at --

05:35 2 THE COURT: I think that's fine with me
05:35 3 too.

05:35 4 MR. CALDWELL: That's fine.

05:35 5 THE COURT: Yeah, if it's from -- now,
05:35 6 Kristie's been kind of hit or miss lately on how
05:35 7 accurate she is, and so I could see where you'd have a
05:35 8 concern there.

9 (Laughter.)

05:35 10 THE COURT: But no. I think that's fine.
05:35 11 If you are quoting what witness X said, that's -- you
05:36 12 don't have to exchange that.

05:36 13 MR. BURESH: Other than that, we exchange
05:36 14 prior to the charge.

05:36 15 THE COURT: Yes, that'd be fine.

05:36 16 MR. CALDWELL: I've one slight caveat.
05:36 17 First of all, I'm fine with all that. What I would
05:36 18 suggest that we do is when the person gets up, like so
05:36 19 if I'm walking up, I at least give him a full one that
05:36 20 also has the text in it rather than -- because
05:36 21 sometimes the numbering's all wrong at that point once
05:36 22 they insert the text, and that's where I had a huge
05:36 23 problem one time where someone would take like a single
05:36 24 "no" at the bottom that was on the second question and
05:36 25 they'd say, did you study this and highlight something.

05:36 1 THE COURT: I see no reason why you can't
05:36 2 exchange the full one when you stand up.

05:36 3 MR. CALDWELL: Okay.

05:36 4 MR. BURESH: Agreed.

05:36 5 THE COURT: Okay. Very good. All good.
05:36 6 Yes, sir.

05:36 7 MR. SIEGMUND: We can do it whenever,
05:36 8 Your Honor. Would you like to go ahead and do the
05:36 9 objection to the charge real quick?

05:36 10 THE COURT: Sure. I would have forgotten
05:36 11 if you hadn't said something.

05:36 12 Does the plaintiff have any objections?

05:37 13 Well, go ahead. If you want to do the
05:37 14 defendant's, I'll hear it from the plaintiff. Doesn't
05:37 15 matter what order.

05:37 16 MR. SCHMIDT: Very briefly, Your Honor.

05:37 17 We just object to -- or we do object to
05:37 18 the inclusion of the willful blindness instruction.

05:37 19 THE COURT: Okay. Now, what you should
05:37 20 do because that won't be -- none of us will remember
05:37 21 that. If you will get together with the plaintiff and
05:37 22 make sure it's clear, we enter into the record what you
05:37 23 either wanted or didn't want just so if you are going
05:37 24 to take that up, it's clear to the Circuit what you
05:37 25 meant by what you just said. And so I want you to

05:37 1 protect your record in that way.

05:37 2 So however you all want to do it to get
05:37 3 it into the record what you either wanted me to give
05:37 4 and I didn't or didn't and however -- whatever you want
05:37 5 to protect yourself, I think you should make sure
05:37 6 there's a written copy of that.

05:37 7 MR. SCHMIDT: Thank you. We'll take care
05:37 8 of that.

05:37 9 THE COURT: Any objections for plaintiff?

05:37 10 MS. HALEY: Plaintiff has just an
05:38 11 objection about the claim construction instruction, and
05:38 12 we'll put it on file.

05:38 13 THE COURT: That's all good. Those are
05:38 14 both obviously overruled.

05:38 15 Is there anything else?

05:38 16 Okay. Yes, sir.

05:38 17 MR. BURESH: Nothing for defendant.

05:38 18 THE COURT: And so we'll start tomorrow
05:38 19 at 8:30. The plaintiff will call their witness back to
05:38 20 explain that he was the one that used the microscope,
05:38 21 and that will go very quickly.

05:38 22 I will then read the jury charge. If you
05:38 23 have issues with the jury charge, someone flag me down
05:38 24 before you start the closing arguments and I'll dismiss
05:38 25 the jury. We'll take up the objections if there are

05:38 1 any.

05:38 2 And so I would counsel you, though,
05:38 3 unlike the average day where one of you wants to argue
05:38 4 that someone has put something in red and that will
05:38 5 prejudice, what I intend to take up tomorrow is
05:39 6 something like you excluded this during the trial, and
05:39 7 it can't come in. Otherwise, I'm going to very rapidly
05:39 8 deal with any objections.

05:39 9 I want to give you all a wide berth on
05:39 10 the closing to have what's in the slide that you can.
05:39 11 It really needs to be something that you think you
05:39 12 would win on if I had to rule on it. So...

05:39 13 MR. CALDWELL: One other thing. I think
05:39 14 the order from the Court in this case allocates 30
05:39 15 minutes for closing. I know that there --

05:39 16 THE COURT: No. I'm happy to give you
05:39 17 45.

05:39 18 MR. CALDWELL: Okay.

05:39 19 THE COURT: I'm not happy to give you 45.

05:39 20 MR. CALDWELL: You're willing.

05:39 21 THE COURT: I'm willing.

05:39 22 Here's the deal. You all are giving me
05:39 23 back probably a whole day on Friday. And so I think
05:39 24 it's -- y'all were very -- I mean, so, you know, to be
05:39 25 fair, giving you, you know, 15 more minutes more per

05:40 1 side --

05:40 2 MR. CALDWELL: Perfect. Thank you.

05:40 3 THE COURT: -- is fine because we'll

05:40 4 still be done on Thursday morning.

05:40 5 Yes, sir.

05:40 6 MR. BURESH: May we release Dr. Goossen

05:40 7 given the odd circumstance here?

05:40 8 MR. CALDWELL: We don't intend to call

05:40 9 him.

05:40 10 THE COURT: Oh, sure.

05:40 11 MR. BURESH: Okay. Thank you.

05:40 12 MR. SIEGMUND: Did you say 15 minutes or

05:40 13 45?

05:40 14 THE COURT: I would prefer four minutes

05:40 15 per side.

16 (Laughter.)

05:40 17 THE COURT: Now -- and y'all have done

05:40 18 this before in here, but I'll say it again on the

05:40 19 record. I'm not -- I don't require there be a 50/50

05:40 20 split on yours, but it can't be 6 minutes and then 40

21 minutes.

05:40 22 And number two, which I never thought I'd

05:40 23 have to say, but every trial I learn something new. If

05:40 24 one of you is speaking and giving the closing argument,

05:40 25 no one else gets to stand up and say sit down. I'm

05:41 1 going to finish the closing argument.

05:41 2 Number one, I don't think it looks very
05:41 3 good. Number two, you need to ask my permission to do
05:41 4 it. You should have asked my permission to do it, and
05:41 5 I will be very unhappy. So if someone stands up to
05:41 6 give the closing argument, they're giving the closing
05:41 7 argument.

05:41 8 Even if the rest of the team is unhappy
05:41 9 about the quality of the closing argument, you
05:41 10 don't -- this isn't football. You don't get to run
05:41 11 someone in halfway through.

05:41 12 Now, you can split if you're going to
05:41 13 ask. You're welcome to have two different lawyers to
05:41 14 do the opening and closing of yours.

05:41 15 MR. CALDWELL: Yes, sir. We don't plan a
05:41 16 hook and lateral, but we do plan that we may split.

05:41 17 THE COURT: Just whoever stands up,
05:41 18 they're doing it for their -- whatever allotment they
05:41 19 have, in your case, you don't get to bench them because
05:41 20 you're unhappy.

05:41 21 MR. CALDWELL: We're on Mande's leash.

05:42 22 THE COURT: There's no benching, which I
05:42 23 never thought I'd have to say, but I do.

05:42 24 So okay. I will see you tomorrow morning
05:42 25 at 8:30.

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THE BAILIFF: All rise.

05:42

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(Hearing adjourned.)

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1 UNITED STATES DISTRICT COURT)
2 WESTERN DISTRICT OF TEXAS)
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5 I, Kristie M. Davis, Official Court
6 Reporter for the United States District Court, Western
7 District of Texas, do certify that the foregoing is a
8 correct transcript from the record of proceedings in
9 the above-entitled matter.

10 I certify that the transcript fees and
11 format comply with those prescribed by the Court and
12 Judicial Conference of the United States.

13 Certified to by me this 3rd day of
14 October 2024.

15
16 /s/ Kristie M. Davis
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